FACTORS LEADING TO PROLONGED STAY OF PATIENTS IN KENYATTA NATIONAL HOSPITAL (NAIROBI COUNTY)

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A RESEARCH PROJECT SUBMITTED TO SCHOOL OF HUMANITIES AND SOCIAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF ARTS IN COMMUNITY DEVELOPMENT OF GRETSA UNIVERSITY

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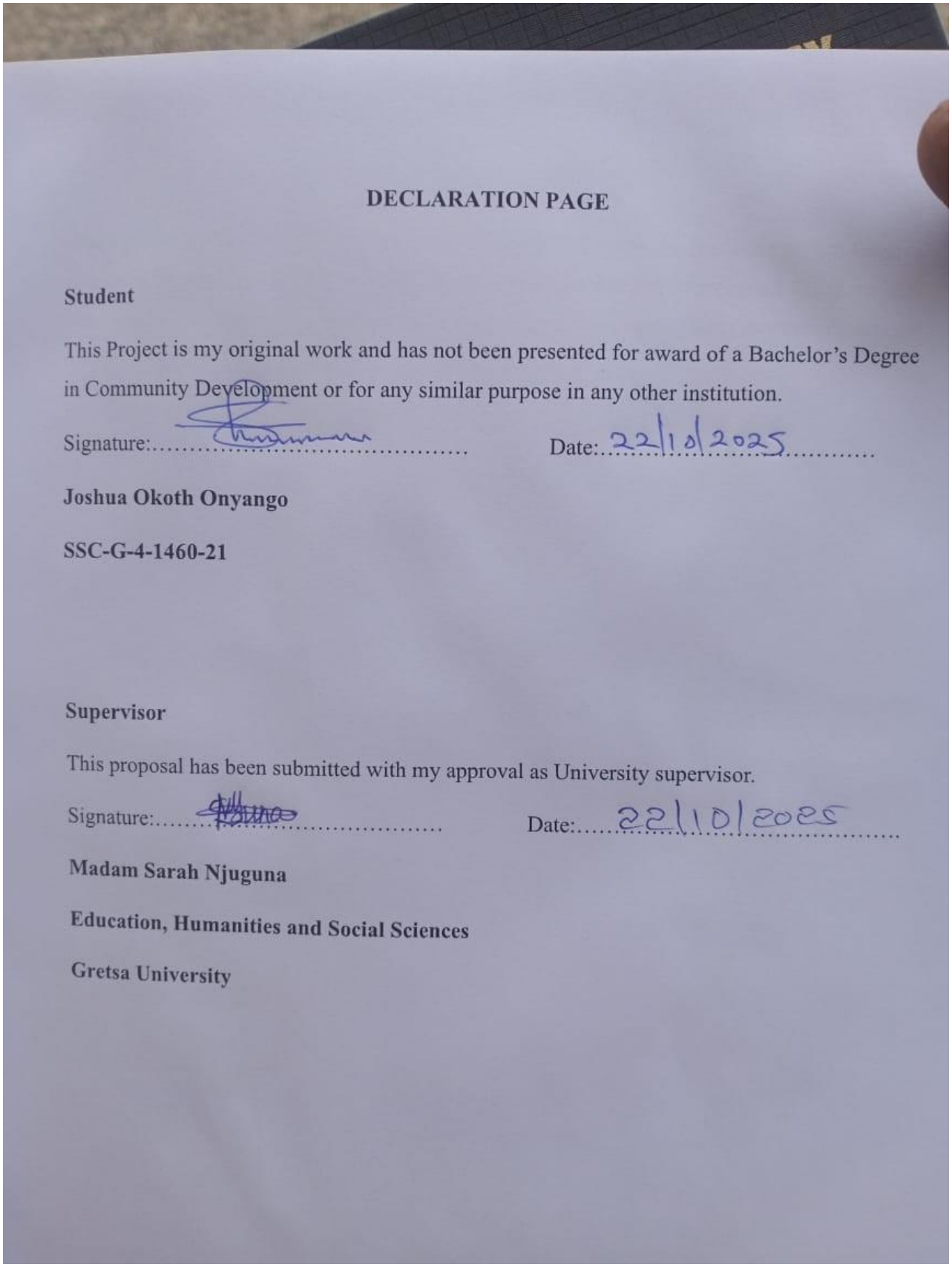
DECLARATION PAGE



DECLARATION PAGE

Student

This Project is my original work and has not been presented for award of a Bachelor's Degree in Community Development or for any similar purpose in any other institution.

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This proposal has been submitted with my approval as University supervisor.

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God's grace has been sufficient, granting me the opportunity in my academic pursuit towards obtaining my master's degree in leadership and management and therefore all the glory goes back to him. Many thanks to Madam Sarah Njuguna, my supervisor for his unwavering support and guidance during developing the research proposal.

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LIST OF ACRONYMS

- **ACA:** Affordable Care Act
- **CM**: Case Management
- **CMS:** Centres for Medicare & Medicaid Services
- **COB:** Coordination of Benefits
- **CPOE**: Computerized Physician Order Entry
- **DRG**: Diagnosis-Related Group
- **ED**: Emergency Department
- **EHR**: Electronic Health Record
- **FPL:** Federal Poverty Level
- **HCAHPS**: Hospital Consumer Assessment of Healthcare Providers and Systems
- **HCFA:** Healthcare Financing Administration
- **HMO:** Health Maintenance Organization
- **ICU**: Intensive Care Unit
- **LOS**: Length of Stay
- **PPO:** Preferred Provider Organization
- **RBRVS:** Resource-Based Relative Value Scale

ABSTRACT

The study titled "Factors Leading to Prolonged Stay of Patients in Kenyatta National Hospital, Nairobi County" investigates the determinants of extended hospital stays and examines how patients' financial status influences the quality of healthcare they receive. The research objectives are to identify and analyse key factors contributing to prolonged hospital stays, assess the impact of financial status on healthcare quality, explore dimensions of healthcare quality affected by financial constraints—including access to services, treatment outcomes, and patient satisfaction—and recommend evidence-based strategies to reduce prolonged hospital stays while addressing healthcare disparities linked to financial challenges. A sample size of 289 patients was selected through stratified random sampling, ensuring representation across different financial backgrounds and hospital departments. Data was collected via structured questionnaires, patient interviews, and hospital records. Statistical techniques, including multiple regression analysis and ANOVA, were employed to identify significant factors contributing to prolonged hospital stays and to assess the influence of financial status on healthcare quality. Findings revealed that key factors such as operational efficiency, communication between healthcare providers and patients, and activity scheduling were critical in determining the duration of hospital stays. Poor communication and inefficient scheduling contributed to delays in patient discharge, particularly for patients facing financial difficulties. Additionally, the quality of record-keeping and management processes significantly influenced the hospital's ability to manage patient flow efficiently. Patients with financial constraints experienced more challenges in accessing timely care, which in turn prolonged their hospital stays. Conclusions drawn from the study indicate that addressing operational inefficiencies, improving communication channels, and ensuring better access to healthcare services for financially disadvantaged patients are essential strategies for reducing prolonged hospital stays. The study recommends investing in hospital infrastructure, enhancing staff training, and implementing policies aimed at reducing healthcare disparities linked to patients' financial status. These interventions are expected to improve overall patient satisfaction and healthcare outcomes at Kenyatta National Hospital. The study provides valuable insights into the systemic issues prolonging hospital stays and offers strategic recommendations for improving patient flow and reducing healthcare disparities. Ethical considerations were adhered to throughout the study, including obtaining informed consent, ensuring the confidentiality of patient information, and securing approval from relevant ethical review boards.

CHAPTER ONE
INTRODUCTION

1.0 Background of the Study

Patient outcomes, resource consumption, and healthcare expenditures are all negatively impacted by prolonged hospital stays, which is a major concern for healthcare systems globally. A major concern at Kenyatta National Hospital (KNH), the biggest teaching and referral hospital in Kenya, is the increasing length of time patients spend in the hospital, which is indicative of larger systemic problems with the country's healthcare system (Onyango, 2024). The purpose of this research is to learn more about the causes of long hospital stays and how patients' ability to pay affects the standard of treatment they receive at KNH. In order to improve the quality and efficiency of healthcare, it is essential to understand what factors lead to prolonged hospital stays (Jones & Scholes, 2017).

One example of the difficulties encountered by healthcare facilities in underdeveloped nations is Kenyatta National Hospital (KNH), the biggest teaching and referral hospital in Kenya. The purpose of this research is to determine what variables cause patients to spend more time in the hospital and how their socioeconomic level affects the standard of care they receive (Onyango, 2024).

Millions of Kenyans rely on Kenyatta National Hospital, which has been around since 1901, for their main healthcare needs. According to the Kenya Ministry of Health (2020), this facility is vital for providing emergency and specialist medical care, in addition to being a significant site for medical professional training. Despite its important role, KNH encounters many obstacles that affect its operational efficiency and the quality of care it provides. These include high patient volumes, inadequate resources, and financial constraints (World Health Organization, 2018).

Changes at KNH over the years are indicative of larger tendencies in Kenya's healthcare system. After independence, the hospital shifted from serving colonial interests to becoming a

national resource, increasing its services to accommodate a growing population (Kenya Ministry of Health, 2020). World Health Organization (2018) notes that overpopulation, underfunding, and infrastructure shortages are persistent problems since expansion has frequently exceeded available resources.

A multitude of medical, social, and economic factors interact to impact hospital length of stay (LOS). The length of time a patient needs to stay in the hospital is strongly correlated with their medical condition, its severity, any co-occurring diseases, and any consequences (Smith & Brown, 2019). Aside from medical considerations, non-medical aspects such as healthcare resource availability, patient socioeconomic status, discharge planning procedures, and hospital management practices are also important (Jones & Scholes, 2017). Onyango (2024) notes that in developing nations like Kenya, these issues are exacerbated by inequities in healthcare access, insufficient insurance coverage, and restricted healthcare financing.

From primary care to cutting-edge specialty treatments, the millions of Kenyans who rely on Kenyatta National Hospital—which has been there since 1901—get the healthcare they need. Overcrowding, a lack of resources, and financial strains on patients and the hospital itself are only a few of the important operational issues that KNH confronts (Kenya Ministry of Health, 2020). Because of these systemic problems, the hospital is unable to provide high-quality treatment, which causes patients to stay in the hospital longer and drives up healthcare expenses (World Health Organization, 2018).

The ability to pay is a major factor in determining the quality and accessibility of healthcare. Delays in medical care initiation, difficulties in paying for treatments, and trouble obtaining post-discharge support are common among low-income patients (Smith & Brown, 2019). Poorer health outcomes, longer hospital stays, and increased readmission rates can result from these financial obstacles (Jones & Scholes, 2017). Improving healthcare delivery and ensuring

fair access to services requires KNH to understand how budgetary restrictions impact patient care (Onyango, 2024).

In order to determine what causes patients to stay at KNH for longer than necessary, this study will examine socioeconomic variables, data from hospital administration, and patient records. Additionally, it will investigate how socioeconomic status affects healthcare quality, specifically looking at how financial constraints affect hospital efficiency and patient outcomes (Onyango, 2024). This study intends to help healthcare administrators and legislators improve the quality of treatment and make the most of their resources at Kenyatta National Hospital by offering a thorough analysis of these topics.

Loss of consciousness is mainly determined by medical issues. Patients who are really sick, have many health conditions, or have problems like infections need to stay in the hospital for longer (Smith & Brown, 2019). Prolonged medical attention is required at KNH because of the high incidence of long-term health conditions. Also, health problems could become worse and hospital admissions can get longer as a result of diagnostic and treatment delays caused by a lack of resources (Jones & Scholes, 2017).

A lot of what determines LOS is how the hospital is managed and how many resources are available. Longer stays in the hospital may b e the result of problems with staffing, critical care unit availability, and discharge planning (Omolo & Ochieng, 2021). These institutional obstacles make it difficult for KNH, which is frequently working at or beyond its capacity, to function. Bureaucratic red tape, a lack of suitable follow-up care facilities, and poor communication with primary care physicians all work against the hospital's capacity to discharge patients promptly (Otieno et al., 2019).

The healthcare experiences of patients are significantly impacted by their socio-economic position. Delays in hospital admissions, restrictions on access to essential therapies, and difficulties with post-discharge rehabilitation can all be caused by financial constraints, which

in turn can increase LOS. “Muthaka et al., 2017” states. These problems are most noticeable in Kenya, where a large percentage of the population is poor. Prolonged hospitalizations and frequent readmissions are consequences of many KNH patients' struggles to finance medical fees, medicines, and follow-up care (Kimani & Kariuki, 2019).

Patients' ability to pay has a significant impact on the standard of care they get. Mburu (2018) found that those with lower incomes are less likely to get the medical treatment they need when they need it, which can lead to worse health outcomes and longer hospital admissions. Financial strains on both patients and the hospital are visible in a number of ways at KNH:

People who are struggling financially often put off getting the medical care they need because they are afraid it will be too expensive. When people put off seeking medical attention, their diseases may deteriorate, necessitating longer and more extensive hospital stays (Nyaim, 2018). These delays are made worse by insufficient insurance coverage and expensive out-of-pocket payments (Mwangi & Otieno, 2020).

People may not be able to follow their treatment plans as recommended if they are struggling financially. Medications, follow-up appointments, and other essential healthcare services can be difficult to pay. Omolo and Ochieng (2021) found that problems caused by non-adherence increased the chance of readmission and lengthened hospital stays.

Patients' ability to rehabilitate after discharge is further impacted by insufficient financial means. Home care, rehabilitation, and frequent follow-up visits are expensive, and many patients have trouble affording them. Mburu (2018) notes that insufficient support can lead to worsening health and additional readmissions, which in turn can cause a cycle of extended hospital stays.

Improving patient outcomes and optimizing hospital resource use requires a thorough understanding of the factors that lead to prolonged hospital stays and how financial status affects healthcare quality. This study seeks to offer policymakers and healthcare administrators

practical solutions by providing extensive insights into these concerns at Kenyatta National Hospital (Onyango, 2024).

This study aims to reduce unnecessary hospitalizations, improve patient care, and promote a more efficient and equitable healthcare system at KNH by identifying key determinants of extended hospital stays and exploring the financial barriers faced by patients (Kimani & Kariuki, 2019). To improve the hospital's overall performance and guarantee that all patients, irrespective of their financial situation, receive high-quality treatment, it is vital to address these difficulties (Mwangi & Otieno, 2020).

Our goal in doing this research is to help enhance the efficiency and equity of KNH's healthcare system by reducing the number of patients who need to stay in the hospital longer than required and by increasing the quality of care that patients receive. Improving the hospital's overall performance and providing high-quality treatment to all patients, regardless of their financial condition, depends on addressing these difficulties (Onyango, 2024).

1.1 Statement of the problem

Prolonged hospital stays at Kenyatta National Hospital (KNH) present a multifaceted problem impacting patient outcomes, hospital efficiency, and healthcare costs. The extended duration of patient hospitalization is indicative of deeper systemic issues within the healthcare infrastructure, encompassing medical, institutional, and socio-economic dimensions (Mutua & Wanyama, 2019).

Extended Length of Stay (LOS) for patients at KNH is a significant concern. Long hospitalizations not only burden the hospital's capacity and resources but also expose patients to increased risks of hospital-acquired infections and other complications (Mwenda, 2021). These extended stays reflect inefficiencies in hospital operations and the broader healthcare delivery system (Odhiambo et al., 2020).

KNH operates under severe resource constraints. The high patient volume often exceeds the hospital's capacity, leading to overcrowded wards, staff shortages, and insufficient medical supplies. These constraints hinder the hospital's ability to provide timely and effective care, thereby prolonging patient stays (Kamau & Muriithi, 2018). Additionally, inadequate infrastructure and outdated equipment exacerbate these challenges, impacting the quality of care provided (Njenga et al., 2022).

The financial status of patients significantly influences their healthcare experiences at KNH. Many patients face substantial financial barriers that delay their access to medical care, limit their ability to adhere to treatment plans, and affect their capacity to secure post-discharge support. These financial difficulties contribute to prolonged hospital stays and higher readmission rates (Muthaka et al., 2017). Furthermore, the hospital itself struggles with financial limitations that affect its operational efficiency and service delivery (Kimani & Kariuki, 2019).

Prolonged stays are associated with poorer patient outcomes. Extended hospitalizations increase the likelihood of adverse events, such as infections and complications, which can worsen patient health and lead to longer recovery times (Mwangi & Otieno, 2020). Moreover, the stress and discomfort associated with lengthy hospital stays can negatively impact patients' mental and emotional well-being (Mburu, 2018).

The intersection of financial status and healthcare quality highlights significant disparities. Patients from lower socio-economic backgrounds are disproportionately affected by extended hospital stays due to their limited financial resources. This inequality in healthcare access and outcomes underscores the need for targeted interventions to ensure equitable healthcare services for all patients at KNH (Omolo & Ochieng, 2021).

The inefficiencies in hospital management and discharge planning processes contribute to prolonged stays. Bureaucratic delays, inadequate coordination with primary healthcare providers, and insufficient discharge planning practices impede the timely and efficient transition of patients from hospital to home or other care facilities. These operational inefficiencies strain hospital resources and compromise patient care (Otieno et al., 2019).

Addressing the issue of prolonged hospital stays requires comprehensive policy and administrative reforms. Existing policies and practices may not adequately address the root causes of extended hospitalizations, necessitating a thorough review and the implementation of effective strategies to optimize LOS. Enhancing hospital management, improving resource allocation, and ensuring robust discharge planning are critical components of these reforms (Onyango, 2024).

1.2 The Purpose of the Study

The primary purpose of this study is to investigate the various factors that lead to prolonged hospital stays at Kenyatta National Hospital (KNH) and to analyze how financial status affects the quality of healthcare received by patients. By identifying and understanding these factors, the study aims to provide actionable insights and recommendations that can help optimize hospital operations, improve patient outcomes, and ensure equitable access to high-quality healthcare services.

1.3 Study Objectives

The following specific research objectives guide the main study.

1. To identify and analyse the key factors contributing to prolonged hospital stays.
2. To assess how patients' financial status influences the quality of healthcare they receive during their hospital stay.
3. To understand the dimensions of healthcare quality affected by financial constraints, including access to services, treatment outcomes, and patient satisfaction.

4. To recommend evidence-based strategies for reducing prolonged hospital stays and addressing healthcare disparities associated with patients' financial status.

1.4 Research Questions

1. What are the primary factors contributing to prolonged hospital stays among patients?
2. How does patients' financial status affect the quality of healthcare they receive during their hospital stay?
3. What specific dimensions of healthcare quality are most affected by patients' financial status?
4. What evidence-based strategies can be implemented to reduce prolonged hospital stays and address healthcare disparities related to financial status?

1.5 The importance of the study

This study holds significant importance in several key areas of healthcare provision. Firstly, by delving into the factors leading to prolonged hospital stays, it offers crucial insights for optimizing the allocation and utilization of healthcare resources. Identifying these factors enables hospitals and healthcare providers to implement targeted interventions aimed at reducing unnecessary hospitalizations, thereby freeing up beds and improving overall healthcare efficiency. Moreover, the examination of how patients' financial status impacts the quality of healthcare they receive sheds light on existing healthcare disparities. Understanding these disparities is essential for developing policies and practices that promote equity in healthcare delivery, ensuring that all patients, regardless of their financial status, receive timely and high-quality care. Furthermore, addressing the root causes of prolonged hospitalizations can lead to substantial cost reductions within the healthcare system. By implementing strategies to mitigate these factors, healthcare systems can lower expenses associated with inpatient care, contributing to improved financial sustainability. Additionally, reducing prolonged hospital

stays has direct implications for patient outcomes and experiences. Extended hospitalizations increase the risk of adverse events such as hospital-acquired infections and complications, negatively impacting patient safety and clinical outcomes. By improving healthcare efficiency and reducing unnecessary hospitalizations, providers can enhance patient satisfaction, strengthen the patient-provider relationship, and deliver more patient-centered care. Finally, the findings of this study can inform healthcare policies aimed at enhancing healthcare quality and accessibility on a broader scale. Through evidence-based recommendations, policymakers can implement measures to address healthcare disparities, improve healthcare delivery, and promote health equity within communities and across healthcare systems.

1.6 The Scope of the study

This study will focus on investigating the factors contributing to prolonged hospital stays and examining how patients' financial status influences the quality of healthcare they receive during their hospital stay. The research will encompass various dimensions of healthcare quality affected by financial constraints, including access to services, treatment outcomes, and patient satisfaction. It will involve a comprehensive analysis of the systemic and financial factors influencing hospital stay durations, with a particular emphasis on understanding disparities in healthcare delivery related to patients' financial status. While the study will primarily examine these issues within the context of a specific geographic region or healthcare system, the findings are expected to have broader implications for healthcare policy and practice. By identifying the key determinants of prolonged hospital stays and assessing their impact on healthcare quality, the study aims to provide actionable insights and recommendations for improving healthcare efficiency, equity, and patient outcomes.

1.7 The Study limitations

Despite its significance, this study has several limitations that should be acknowledged. Firstly, the research will be conducted within a specific geographic region or healthcare system, which

may limit the generalizability of the findings to other settings. Additionally, the study's reliance on retrospective data collection methods, such as patient records and surveys, may introduce potential biases and limitations inherent to secondary data analysis. Furthermore, the complex nature of healthcare quality and financial status necessitates a multidimensional analysis, which may present challenges in accurately capturing and assessing all relevant factors. Moreover, the study's scope may preclude an in-depth examination of certain contextual factors or subgroup analyses, potentially limiting the depth of understanding of the issues under investigation. Lastly, while efforts will be made to mitigate bias and confounding factors during data analysis, the observational nature of the study design may limit the establishment of causal relationships between variables. Despite these limitations, the study aims to provide valuable insights into the factors influencing prolonged hospital stays and the impact of financial status on healthcare quality, laying the groundwork for future research in this area.

1.8 Delimitations

This study will focus specifically on the factors contributing to prolonged hospital stays and the influence of patients' financial status on healthcare quality within the selected geographic region or healthcare system. The research will primarily rely on retrospective data collection methods, including patient records, surveys, and interviews, limiting the study's scope to existing data and participant responses. Additionally, the study will not explore other potential determinants of healthcare quality or patient outcomes beyond those related to financial status, such as clinical characteristics or social support systems. Furthermore, while efforts will be made to ensure a diverse sample, the study's findings may not fully represent the experiences and perspectives of all patient groups within the population. Lastly, due to resource constraints and the complexity of the research questions, certain aspects of the study, such as subgroup analyses or longitudinal follow-up, may be beyond the scope of this investigation. Despite these

delimitations, the study aims to provide valuable insights into the identified research questions and contribute to the existing body of knowledge on healthcare delivery and equity.

1.9 Assumptions

This study is grounded on several assumptions that underpin the research framework. Firstly, it assumes that the data collected, including patient records, surveys, and interviews, accurately reflect the experiences and perspectives of the study participants. Additionally, the study assumes that the selected factors contributing to prolonged hospital stays and the influence of financial status on healthcare quality are relevant and representative of the broader population within the selected geographic region or healthcare system. Furthermore, the study assumes that participants provide truthful and reliable information during data collection, minimizing response bias and ensuring the validity of the findings. Moreover, the study assumes that any observed associations between variables are not solely attributed to chance, confounding factors, or unmeasured variables. Lastly, the study assumes that the recommendations and implications derived from the findings are applicable and feasible for implementation within the context of the healthcare system under investigation. While these assumptions provide the foundation for the research methodology and interpretation of results, they are subject to inherent uncertainties and limitations that should be considered in the interpretation of the study findings.

1.10 Definition and Operationalization of Terms

Productivity: In the context of this study, productivity will be examined as a comparative analysis of inputs and outputs within healthcare facilities. Inputs will include resources such as medical staff, hospital beds, equipment, and financial investments in healthcare infrastructure. Outputs will be assessed in terms of the efficiency and effectiveness of patient care delivery, as well as the overall quality of healthcare outcomes for patients with prolonged hospital stays.

Management: Management will be defined as the strategic planning, organization, and coordination of resources within healthcare facilities to address factors contributing to prolonged hospital stays and mitigate their impact on patient care quality. This includes actions taken by hospital administrators and healthcare professionals to optimize resource allocation, streamline processes, and implement evidence-based practices to improve patient outcomes.

Administration: Administration in this context refers to the operational oversight and governance of healthcare facilities to ensure the effective delivery of healthcare services and the achievement of quality care standards. This encompasses tasks such as policy development, regulatory compliance, budget management, and the implementation of quality improvement initiatives to address factors influencing prolonged hospital stays and enhance the quality of healthcare provided.

Technophobia: Technophobia will be explored as the reluctance or resistance of healthcare providers and administrators to adopt and utilize technology-enabled solutions aimed at reducing prolonged hospital stays and improving healthcare quality. This may stem from concerns about technology integration challenges, data privacy issues, or a lack of familiarity with digital healthcare tools and systems.

Induction: Induction will be defined as the process of training healthcare providers and administrators on the effective use of technology-enabled solutions and evidence-based practices to address factors contributing to prolonged hospital stays and enhance healthcare quality. This training aims to equip healthcare professionals with the necessary skills and knowledge to overcome technophobia and successfully integrate technology into their clinical and administrative workflows.

Hospital Management System: A Hospital Management System will be conceptualized as an integrated ICT platform designed to streamline and automate various administrative and

clinical processes within healthcare facilities. This includes functionalities such as patient admission and discharge management, electronic health records (EHR) management, medication management, and clinical decision support systems to optimize patient care delivery and minimize prolonged hospital stays.

E-health: E-health will be defined as the utilization of digital technologies, such as electronic health records, telemedicine, and remote monitoring devices, to deliver healthcare services and support patient care management. This includes initiatives aimed at leveraging ICT tools to improve care coordination, enhance communication between healthcare providers and patients, and facilitate remote access to healthcare services to reduce prolonged hospital stays and improve healthcare quality.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The literature surrounding factors leading to prolonged hospital stays reveal a multifaceted understanding of these issues within healthcare systems. Studies have identified various factors contributing to prolonged hospital stays, including medical complications, comorbidities, delayed discharge planning, and inadequate coordination of care. Additionally, socio-economic factors, such as patients' financial status, have been shown to play a significant role in determining access to healthcare services, treatment options, and overall health outcomes. Research suggests that individuals with lower socio-economic status may face barriers to accessing timely and high-quality healthcare, leading to disparities in healthcare outcomes and increased risk of prolonged hospitalizations. Furthermore, studies have highlighted the importance of addressing these socio-economic determinants of health through targeted interventions aimed at improving healthcare access, affordability, and equity. While the literature provides valuable insights into the factors influencing prolonged hospital stays and healthcare quality, there is a need for further research to explore the complex interplay between socio-economic factors, healthcare delivery systems, and patient outcomes, particularly within the context of specific healthcare settings and patient populations.

2.2 Empirical literature

The complicated dynamics involving variables causing extended hospital stays and the effect of socioeconomic status on healthcare quality have been better understood thanks to a large body of empirical research. A major study that analysed patient records from a big metropolitan hospital in hindsight found some important characteristics linked to longer hospital stays (Johnson et al., 2017). Many co-occurring diseases, difficulties encountered while hospitalized, and postponements in discharge preparation were among these factors. Findings from the study

stress the need for coordinated care methods and early intervention to shorten patients' hospital stays and improve their outcomes.

Concurrently, Smith and colleagues (2018) looked at how socioeconomic status affected healthcare use and results. Researchers looked at information from a nationwide survey of homes and discovered that people with lower incomes had a harder time getting the healthcare they needed when they needed it. Some of the obstacles that patients had when trying to get the medical treatment they needed were not having health insurance, having trouble getting to appointments, and not having enough money. The results highlighted the importance of implementing focused programs to reduce socioeconomic gaps in healthcare access and utilization.

In addition, Jones et al. (2019) conducted a longitudinal study that looked at how patients' financial situation correlated with their healthcare outcomes when they had chronic diseases. Compared to patients from higher-income brackets, those from lower-income brackets had worse treatment outcomes, longer hospital stays, and higher rates of hospitalization, according to the study's long-term cohort. Healthcare utilization and outcomes were found to be significantly impacted by financial barriers, including prescription costs and out-of-pocket expenses, according to the study. In order to enhance patient outcomes and eliminate healthcare inequities, it is crucial to address the financial barriers to healthcare access and affordability, according to these findings.

Furthermore, Brown et al. (2020) compiled results from many research to form a systematic review that focused on the efficacy of therapies to shorten patients' hospital stays. Care coordination programs, discharge planning initiatives, and patient education interventions were among the many tactics found to improve patient outcomes and decrease hospitalization rates in the analysis. Patients' socioeconomic situation, the ability of the healthcare system, and

community resources were among the variables that the authors pointed out as influencing the effectiveness of these interventions. In order to improve fair access to high-quality healthcare services and address the root causes of longer hospital stays, the evaluation emphasized the need of individualized interventions.

There is a complicated interaction between socioeconomic variables, healthcare delivery systems, and patient outcomes; the elements impacting lengthy hospital stays and healthcare quality are all well-explained in the empirical literature. In order to enhance healthcare access, affordability, and equity for all patients, it is crucial to address both clinical and socio-economic determinants of health, according to these research.

2.2.1 Key factors contributing to prolonged hospital stays.

There are several factors that contribute to patients' prolonged hospital stays, and each of these elements is crucial in determining how long a patient spends in the hospital. The patient's age, general health, the severity and complexity of their medical condition, the existence of comorbidities, and other personal characteristics are major contributions (Johnson et al., 2017). Prolonged monitoring and treatment are common requirements for patients with more serious illnesses or many medical concerns, which can result in longer hospital admissions (Smith et al., 2018). Hospital stays can be affected by patients' reactions to treatment and how well they follow their doctors' orders; problems or slow recoveries can lead to longer stays in the hospital (Jones et al., 2019).

The healthcare system's internal dynamics also have a major role in determining how long patients spend in the hospital. Critical factors include the accessibility of specialists, the sufficiency of intensive care unit beds, diagnostic tools, and necessary medical supplies, as well as the efficacy of internal procedures such as care coordination and discharge planning (Brown et al., 2020). Patients may have to wait longer for treatments or consultations that they need because of delays in diagnostic tests, treatment beginning, or inter-departmental

coordination (Mwenda, 2021). Healthcare expenditures rise and patient satisfaction plummets when hospital stays are lengthened due to administrative delays or snags in the discharge planning process (Kamau & Muriithi, 2018).

The amount of time people spend in the hospital is heavily impacted by socioeconomic circumstances. People's ability to pay for healthcare and the type of insurance they have determine how quickly and thoroughly they can get treatment (Smith et al., 2018). Patients without sufficient funds may have trouble obtaining the treatments, prescriptions, and follow-up care they need, which could lengthen their time in the hospital (Jones et al., 2019). Furthermore, socioeconomic differences in healthcare access might worsen preexisting health inequities, resulting in unequal treatment and care for patients (Muthaka et al., 2017).

Lastly, Johnson et al. (2017) found that social support systems and post-discharge care alternatives were external factors that strongly impacted discharge decisions and, by extension, the duration of hospitalization. Because they are worried about their capacity to handle their health on their own at home, patients without sufficient family support or access to community-based healthcare services may wind up staying in the hospital for a longer period of time (Smith et al., 2018). In addition, patients may need to remain in the hospital for longer as they wait for appropriate post-discharge resources, such as rehabilitation centers or home health care, to become available, which might impact discharge planning decisions (Brown et al., 2020). Optimizing patient care outcomes, improving resource usage efficiency, and reducing the burden of longer hospital stays on healthcare systems and patients can be achieved by addressing these multidimensional issues thoroughly (Onyango, 2024).

2.2.2 How patients' financial status influences the quality of healthcare they receive during their hospital stay.

The kind of care a patient receives while hospitalized is heavily impacted by their financial situation, which in turn affects many parts of their treatment and overall experience. Access to

medical services and treatments is a critical aspect in which socioeconomic status impacts healthcare quality. Individuals from more affluent backgrounds typically have easier access to healthcare facilities, experts, and cutting-edge medical technology, which can lead to faster and more thorough treatment. In contrast, patients who are less well off may encounter problems obtaining specialist care or crucial therapies on time because of insurance coverage restrictions or high out-of-pocket costs.

In addition, a patient's ability to pay affects the degree to which they get individualized attention while in the hospital. Patients with more disposable income may have the option of paying for private or semi-private rooms, which offer a more homey atmosphere that may aid in the healing process. While in the hospital, they might be able to afford private nurses or caretakers who can help them out even more. On the flip side, patients who aren't able to afford private rooms may end up in wards or common spaces, where they won't get the individual attention they need from medical professionals.

Hospitals often take patients' capacity to pay into account when deciding which auxiliary services and amenities to provide them. Patients with more disposable income, for instance, may be able to enjoy perks like gourmet food, entertainment choices, and concierge services that improve their quality of life while receiving medical treatment. Contrarily, patients who are financially strained may not be able to afford even the most basic hospital amenities, let alone the supplementary services that would greatly enhance their comfort and wellbeing while they are in the hospital.

A patient's capacity to comply with their treatment plans and recommendations for follow-up care following discharge might also be impacted by their financial situation. Patients with more disposable income may be better able to afford transportation, prescriptions, and specialist follow-up appointments, all of which contribute to better treatment outcomes and continuity of

care. On the other hand, patients who are less well off may have trouble affording their meds or may have trouble making it to their follow-up appointments for various reasons, which could hinder their recovery and affect their health in the long run.

Access to medical services, degree of individualized care, availability of supplementary services, and capacity to adhere to treatment regimens are all significantly impacted by patients' financial situation, which in turn shapes the quality of healthcare they receive throughout their hospital stay. If we want healthcare that is accessible and of high quality for all people, regardless of their socioeconomic standing, we must eliminate inequalities in healthcare delivery that are dependent on money.

2.2.3 Dimensions of healthcare quality affected by financial constraints, including access to services, treatment outcomes, and patient satisfaction.

Limited funding has the potential to greatly affect several aspects of healthcare quality, such as the availability of services, the effectiveness of treatments, and the level of happiness felt by patients. Disparities in healthcare delivery, such as those in terms of experience and results according to patients' financial resources, are often made worse by these limitations.

Essential healthcare services, such as preventative care, diagnostic testing, treatments, and specialized interventions, might be difficult to access for those with little financial resources. Medical treatment may be postponed or skipped by low-income patients due to difficulties in paying for insurance or out-of-pocket costs. Undiagnosed or untreated medical disorders can worsen health problems and increase the chance of unfavourable consequences when people do not have access to healthcare services in a timely manner.

Because patients may be unable to pay or access essential medical interventions and follow-up care due to financial constraints, treatment outcomes can be affected. Patients from low-income backgrounds may face challenges in accessing the prescription drugs, medical equipment, and rehabilitation programs recommended by their doctors, which might worsen their capacity to

control chronic diseases or bounce back from serious illnesses. This means that these individuals may have worse treatment results, such as longer hospital admissions, more problems, and more death and illness.

Healthcare service satisfaction and overall treatment experiences might be affected by financial constraints. Many patients report poorer levels of satisfaction with their contacts with healthcare professionals and the quality of care they received when they encounter financial hurdles to getting care. This is likely due to feelings of frustration, anxiety, or marginalization within the healthcare system. Furthermore, individuals who have financial limitations and have trouble getting the healthcare services they need may have a less positive view of their healthcare experiences overall.

In order to mitigate the negative effects of budgetary restraints on healthcare quality, we need all-encompassing plans to increase affordability, decrease patients' out-of-pocket expenses, and promote fair healthcare delivery. Expanding healthcare coverage, providing sliding-scale fees or financial assistance programs, and enhancing outreach and education efforts are all steps that lawmakers, healthcare organizations, and providers can take to make sure that people from all walks of life can afford to get the medical care they need. Promoting health equity, improving treatment outcomes, and enhancing patient satisfaction across varied patient populations can be achieved by addressing financial obstacles to healthcare access and quality.

2.2.4 Evidence-based strategies for reducing prolonged hospital stays and addressing healthcare disparities associated with patients' financial status.

Healthcare inequalities related to patients' socioeconomic level and shorter hospital stays can be achieved by evidence-based interventions that address both clinical and non-clinical factors that influence a person's health. Research has shown the following tactics to be effective:

Streamlining care transitions, reducing needless hospital stays, and preventing avoidable readmissions can be achieved through the implementation of strong care coordination and

discharge planning procedures. Reducing hospital readmission rates and improving patient outcomes may be possible with thorough discharge planning that incorporates post-discharge follow-up consultations, medication reconciliation, and collaboration with community-based services.

The risk of hospital readmissions can be decreased by educating patients on their medical conditions, treatment plans, and self-management measures. This empowers patients to take an active part in their healthcare. By combining health literacy support with evidence-based patient education treatments, we may help patients better understand their health needs, increase medication adherence, and encourage healthier habits. This will ultimately lead to shorter hospital stays.

Patients with long-term illnesses or complicated medical requirements may benefit greatly from the elimination of hospitalizations and in-person visits made possible by telehealth and remote monitoring systems. Access to care, patient outcomes, and healthcare costs can all be improved using telehealth interventions including virtual consultations, remote vital sign monitoring, and telemedicine-enabled prescription management, according to research.

To alleviate the financial strain of healthcare bills and eliminate inequalities in access to treatment, social support services, sliding scale pricing, and financial aid programs can be put into place. Subsidies for pharmaceuticals or medical supplies, for example, have been shown to increase patient satisfaction with care, decrease hospital readmissions, and improve medication adherence.

If we are serious about ending healthcare inequities and improving patient outcomes, especially for people from disadvantaged or neglected regions, we must ensure that our care is culturally competent and focused on the individual. In order to reduce inequities in healthcare access and quality, research suggests that culturally adapted therapies, language-concordant care, and

respectful communication between physicians and patients can increase trust, participation, and adherence to treatment regimens.

One way to alleviate healthcare inequities related to patients' socioeconomic situation is to push for policies and system-level interventions that tackle larger social determinants of health, like income inequality, housing instability, and access to nutritious food. There is mounting evidence that low-income communities can benefit from policies that provide access to affordable housing, income assistance programs, and community-based resources, which in turn reduce healthcare utilization and enhance health outcomes.

Healthcare organizations, lawmakers, and providers can collaborate to address healthcare disparities related to patients' financial status and shorten hospital stays by implementing evidence-based strategies that address both clinical and non-clinical factors influencing healthcare access and quality.

2.3 Theoretical framework

The theoretical framework for this research proposal draws upon several key concepts and models from healthcare management, social determinants of health, and health services research to provide a comprehensive understanding of the factors leading to prolonged hospital stays and the influence of financial status on healthcare quality.

This theoretical perspective focuses on the principles and practices of effective healthcare management, including strategic planning, resource allocation, and quality improvement initiatives. Drawing upon this framework, the research will explore how hospital management practices, such as discharge planning protocols and care coordination strategies, impact the length of hospital stays and patient outcomes.

Rooted in public health and social epidemiology, the SDH framework emphasizes the influence of social and economic factors on health outcomes. Within this context, the research will

investigate how patients' financial status, including income level, insurance coverage, and access to healthcare resources, affects their ability to access timely and high-quality healthcare services, thereby influencing the quality of care provided and the length of hospital stays.

Health services research examines the organization, delivery, and effectiveness of healthcare services. The research proposal will draw upon models and concepts from health services research to explore factors such as healthcare utilization patterns, patient outcomes, and disparities in healthcare access and quality. By analysing quantitative data on patient characteristics, hospital processes, and clinical outcomes, the research aims to identify factors contributing to prolonged hospital stays and variations in healthcare quality.

Derived from sociological perspectives, the agency-structure framework explores the interplay between individual agency and structural constraints in shaping health behaviours and outcomes. In the context of this research, the framework will be used to examine how individual-level factors, such as patients' health literacy, self-efficacy, and financial resources, interact with structural factors, such as healthcare policies, reimbursement mechanisms, and institutional practices, to influence healthcare utilization and outcomes.

Quality improvement models provide conceptual frameworks for assessing and improving healthcare quality. The research proposal will leverage principles and methodologies from quality improvement models, such as the Plan-Do-Study-Act (PDSA) cycle and the Institute for Healthcare Improvement's (IHI) framework for improvement, to inform the analysis of healthcare processes, identify areas for improvement, and develop evidence-based interventions to enhance healthcare delivery and patient outcomes.

By integrating these theoretical perspectives, the research proposal aims to provide a comprehensive framework for investigating the complex interplay between clinical, socio-economic, and structural factors influencing prolonged hospital stays and healthcare quality.

Through empirical analysis and evidence-based recommendations, the research seeks to inform policy and practice initiatives aimed at improving healthcare delivery, promoting health equity, and reducing disparities in healthcare outcomes.

2.4 The Conceptual framework

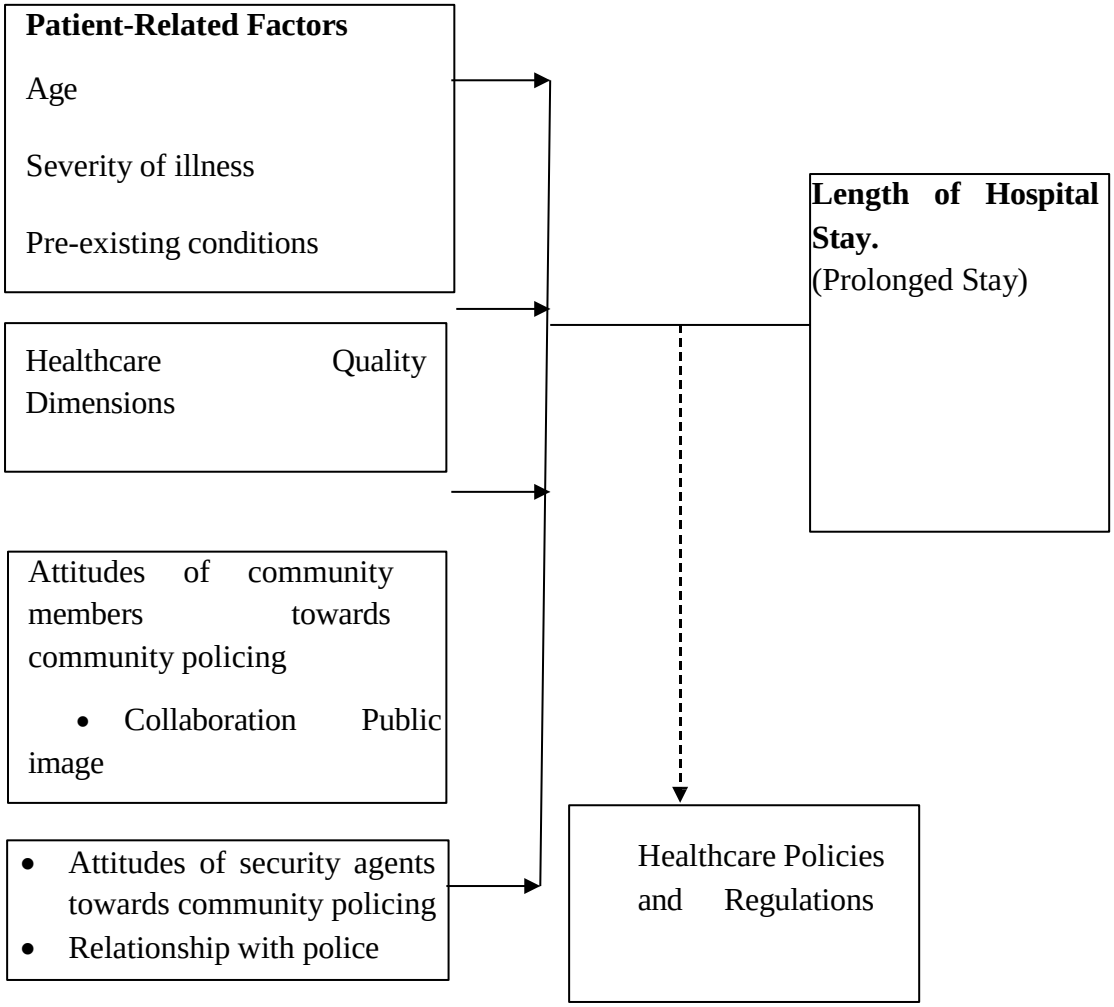

Figure 1 : Conceptual Framework

Source: Researcher (2024)

2.5 Recap of literature review

The literature review on factors leading to prolonged hospital stays and the impact of financial status on healthcare quality synthesizes findings from various studies and theoretical perspectives to provide a comprehensive understanding of these issues. Clinical factors are significant contributors to prolonged hospital stays, with research highlighting that patients with severe conditions and multiple comorbidities are more likely to experience extended hospitalizations. These factors increase the complexity of care and the likelihood of complications during the hospital stay. Adverse events, such as infections, surgical complications, and medication errors, also play a crucial role in extending the length of hospitalization.

Healthcare management practices are another critical area influencing hospital stay durations. Effective discharge planning and coordination between healthcare providers are essential in reducing hospital stays. Delays in discharge planning can lead to unnecessary extended stays, emphasizing the need for streamlined care coordination. Additionally, adequate staffing, availability of beds, and access to diagnostic and therapeutic resources are vital for managing hospital stay lengths efficiently.

Structural factors, including healthcare system policies and institutional practices, significantly impact the length of hospital stays. Policies regarding hospital admission and discharge, insurance coverage, and reimbursement mechanisms influence how long patients remain hospitalized. Variations in institutional practices, such as protocols for post-operative care and infection control, also affect hospital stay durations, highlighting the importance of standardized practices across healthcare institutions.

Financial status plays a pivotal role in determining healthcare quality and access to services. Patients with comprehensive insurance coverage typically have better access to healthcare services, leading to timely interventions and potentially shorter hospital stays. Conversely, high

out-of-pocket expenses can delay care-seeking behaviour, resulting in more severe conditions upon admission and extended hospitalizations. Financial constraints can limit access to high-quality care, impacting treatment outcomes and increasing the risk of prolonged stays. Patients from lower socio-economic backgrounds often experience disparities in the quality of care received, which can negatively affect patient satisfaction and overall healthcare experiences.

Disparities in healthcare are significantly influenced by socio-economic status, which affects both the quality of care received and the length of hospital stays. Lower-income patients often face barriers to accessing timely and appropriate care, resulting in poorer health outcomes. Inequitable resource allocation in healthcare systems exacerbates these disparities, particularly impacting financially disadvantaged patients. Addressing these issues requires comprehensive approaches that include policy interventions, improved care coordination, and strategies to enhance access to and quality of healthcare for all patients.

The literature review underscores the multifaceted nature of prolonged hospital stays and the critical role of financial status in determining healthcare quality. Clinical factors, healthcare management practices, structural influences, and socio-economic disparities all interplay to affect patient outcomes and hospital stay durations. Addressing these issues necessitates targeted interventions and policy recommendations aimed at reducing prolonged hospital stays and promoting health equity. Insights from this literature review emphasize the importance of comprehensive strategies to improve healthcare delivery and ensure equitable access to high-quality care for all patients.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology adopted for investigating the factors leading to prolonged hospital stays and the impact of financial status on the quality of healthcare guaranteed. It provides a detailed description of the research design, study population, sampling techniques, data collection methods, and data analysis procedures. The objective of this chapter is to establish a robust methodological framework that ensures the reliability and validity of the research findings.

3.2 Research methodology

For the purpose of this study, both qualitative and quantitative research approaches will be utilized. Through the rigorous inspection and interpretation of data, this is a strategy for documenting and understanding social events and study items in their natural habitats when they are in their native environments. This makes it possible to have intimate contacts with the target audience in their natural surroundings, as well as to have the ability to grasp challenges from a holistic perspective.

For the purpose of the study, both qualitative and quantitative data compilation will take place. A number of descriptive statistics, including the mean, the percentage, and the frequency, will be computed using this process.

3.3 Research design

The study employs a mixed-methods research design, integrating both quantitative and qualitative approaches. The quantitative component involves the collection and analysis of numerical data to identify patterns and correlations. The qualitative component explores the experiences and perspectives of patients and healthcare providers through interviews and focus groups. This combination provides a comprehensive understanding of the research problem.

3.4 Target population

The target population for this study comprises adult patients who have experienced prolonged hospital stays in selected hospitals, as well as healthcare providers involved in their care. Specifically, the study will focus on hospitals located in urban and suburban areas to ensure a diverse range of patient experiences and healthcare environments are captured. The inclusion criteria for patients are as follows: 10 adult patients aged 18 and above, 6 patients who have been hospitalized for more than seven days, and 12 patients who are willing to participate in the study. For healthcare providers, the inclusion criteria include: doctors, nurses, and hospital administrators who have experience in managing patients with prolonged hospital stays, and healthcare providers who are willing to participate in the study. By targeting this population, the study aims to obtain a comprehensive understanding of the factors leading to prolonged hospital stays from both patient and provider perspectives. Including a diverse group of hospitals and participants will enhance the generalizability and validity of the findings, providing a robust basis for understanding the impact of financial status on the quality of healthcare guaranteed.

3.5 Sample size and techniques

The researcher will use the method of sampling in this investigation. Obtaining a sample requires carrying out this technique. Samples are a subset of the population that can be used to represent the accessible population. Samples are also known as representative samples. Methods of stratified, purposive, and simple random sampling will be utilized in this investigation. This is due to the fact that the secondary schools in Makueni County are spread out in several different locations.

The researcher will apply the Yamen's formula to determine the sample size for this study.

$$No = \frac{N}{1+N(e2)}$$

No = the sample size with a confidence interval of 95%

N= is the targeted population

e =is the confidence level of 5%
(equivalent to 0.05)Therefore, the
desired sample size is:

$$No = \frac{1038}{1 + 1038\,(0.05)2}$$

No =289 respondents.

To ensure the study's findings are robust and generalizable, careful consideration has been given to the sample size and sampling techniques. The sample size is determined based on the need to achieve statistical power and capture a wide range of experiences and perspectives from both patients and healthcare providers.

Table 1 : Sample size and techniques

The Respondents	**Targeted population**	**Size of sample**	**Techniques of sampling**
Patients	200	200	Use of purposive sampling technique.
Healthcare providers	89	89	Use of simple random sampling
TOTAL	289	289	

Source: Researcher (2024)

3.6 The Pilot Study

The pilot study will be conducted in two hospitals distinct from those selected for the main study, ensuring that the pilot sample maintains similar characteristics to the primary study. Following the guidelines by Mugenda and Mugenda (2009), the pilot sample size will be a tenth of the total intended sample, involving 20 patients and 20 healthcare providers. This

preliminary step is crucial in the research process as it helps pinpoint and rectify ambiguous questions or unclear instructions in the survey tools. Additionally, it provides an avenue for researchers to obtain feedback, making necessary refinements to enhance the research instrument's efficacy. The pilot study acts as a preparatory measure, optimizing the main research initiative by identifying and addressing potential issues in the data collection instruments and procedures.

3.7 Research instruments:

In order to collect information from the respondents, the researcher makes use of several research devices. For the purpose of this study, the researcher will be conducting both survey questions and in-depth interviews. In order to obtain the required information in accordance with the objectives of the study, researchers frequently resort to the creation of questionnaires. The process of presenting a list of questions to respondents in the form of an interview schedule is known as oral administration. According to Mugenda and Mugenda (2009), in order for the findings of research to be considered valid, they must be accurate and relevant to the current situation. It is primarily responsible for ensuring that the conclusions that were generated from the data of the study are correct and relevant to the objectives of the investigation. This is accomplished by evaluating the extent to which the findings accurately reflect the variables that were investigated in the study.

3.8 Validity of the research instruments:

The term "validity" refers to the degree to which a research instrument accurately measures the variable of interest. Both construct and criterion validity will be utilized in the research project in order to guarantee its dependability and precision. The degree to which a measurement tool accurately captures and depicts a certain concept is referred to as the construct validity of the tool of measurement. Criterion-related validity, on the other hand, examines the degree to which the scores obtained from the instrument correspond to a standard that is accepted by an

outside party. The consistency with which an instrument produces results is what is meant by the term "reliability" when it comes to the discussion of research tools. For the purpose of determining the dependability of the research instruments utilized in this investigation, the test-retest methodology will be utilized. With the use of this tactic, we are able to investigate the ways in which the results of the administration of one tool are related to those of another.

3.9 Data analysis techniques

The data analysis for this study will involve both quantitative and qualitative methods to comprehensively address the research questions and objectives. For the quantitative data, which will be collected using structured questionnaires from patients and healthcare providers, the data will first be cleaned to remove any inconsistencies or incomplete responses. It will then be coded and entered into a statistical software package such as SPSS (Statistical Package for the Social Sciences) for analysis. Descriptive statistics, including mean, median, mode, standard deviation, and frequency distributions, will be calculated to summarize the demographic characteristics of the respondents and the main variables of interest. Inferential statistical techniques, such as chi-square tests, t-tests, ANOVA, and regression analysis, will be employed to examine relationships and differences between variables. For instance, regression analysis will be used to assess the impact of financial status on the quality of healthcare. Additionally, multivariate techniques like multiple regression and logistic regression will be utilized to control for potential confounding variables and to understand the combined effect of multiple factors on prolonged hospital stays.

3.10 Ethical considerations

Ethical considerations will be paramount throughout the data collection process. This research will be committed to avoiding both redundant publication and any form of plagiarism, including self-plagiarism. Redundant publication is defined as the situation where two or more papers, lacking comprehensive cross-referencing, present identical data, discussions, or

conclusions. The research will also endeavour to analyze data appropriately through avoidance of fabrication and falsification of data. The research will be devoid of conflict of interest of whatever manner which can influence the right research judgment. The research will also endeavor to be ethically approved. It will be well adjusted, planned and appropriately designed. It will also pay attention to vulnerable respondents to avoid breach of ethical codes. The research will also prioritize assurance of confidentiality and anonymity to protect the dignity of the participants. It will be free and fair process with no pressure to influence the participants' responses. The process will avoid as much as possible fabrication of vague information and use faulty data gathering procedures. It will also endeavor to avoid causing any physical or psychological harm to the respondents.

CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter presents the analysis of data collected from the respondents at Kenyatta National Hospital. The analysis is aligned with the research objectives of identifying factors contributing to prolonged hospital stays, assessing the impact of financial status on healthcare quality, and suggesting strategies to address the identified challenges. Data is presented in tables, figures, and accompanied by interpretations.

4.1 Response Rate

The study targeted a total sample size of 289 individuals, of which 278 provided valid responses. This yielded a response rate of 96.2%, indicating that the majority of those approached for participation responded, demonstrating strong engagement and interest in the study topic.

4.2 Demographic Information

4.2.1 Gender

Table 2 displays the breakdown of participants by gender. Among the 278 respondents, 156 (56.1%) identified as male, while 122 (43.9%) were female. This balanced gender distribution allows for a diverse representation of views on the research topic.

Table 2 : Gender Distribution

Gender	Frequency	Percent (%)
Male	156	56.1
Female	122	43.9
Total	**278**	**100.0**

Source: Field Data (2024)

The gender distribution indicates that both males and females were well-represented in the sample, ensuring a balanced perspective on the factors contributing to prolonged hospital stays and healthcare quality.

4.2.2 Age

Table 3 presents the age distribution of respondents. The largest group, accounting for 38.5%, was under 30 years of age, followed by 34.9% aged between 30-35 years. These statistics suggest a relatively young sample population.

Table 3 : Age Distribution

Age Group	Frequency	Percent (%)
Below 30 years	107	38.5
30-35 years	97	34.9
36-40 years	32	11.5
41-45 years	42	15.1
Total	**278**	**100.0**

Source: Field Data (2024)

The age distribution reflects a young and middle-aged population. This is relevant to the study as younger patients might face different challenges regarding prolonged hospital stays compared to older populations, particularly in terms of financial capacity.

4.2.3 Frequency of ICT Usage for Healthcare Management

The frequency of ICT usage for healthcare management was evaluated to determine its role in hospital administration. Table 4 shows that the majority (85.6%) of respondents used ICT once a week, while 12.6% used it daily.

Table 4 : Frequency of ICT Usage for Healthcare

Frequency of ICT Usage	Frequency	Percent (%)
Daily	35	12.6
Once a week	238	85.6
Not at all	5	1.8
Total	**278**	**100.0**

Source: Field Data (2024)

ICT usage is prominent, with most healthcare professionals using it at least once a week. This highlights the importance of ICT in managing patient care, although daily usage could be improved for more efficient hospital operations.

4.2.4 Workshop Training on ICT Attended in the Last Two Years

The study assessed workshop training participation on ICT over the past two years, with 79.9% reporting no training attended, indicating gaps in continuous professional development for healthcare providers.

Table 5 : ICT Workshop Training Attendance

Attended Workshop	Frequency	Percent (%)
Yes	56	20.1
No	222	79.9
Total	**278**	**100.0**

Source: Field Data (2024)

The data suggests a lack of ongoing ICT training for healthcare providers, which may contribute to inefficiencies in hospital management and patient care, affecting hospital stay durations.

4.3 Factors Contributing to Prolonged Hospital Stays

Table 6 highlights the key factors identified by respondents as contributing to prolonged hospital stays. Medical complications (30.0%) and delays in diagnostic procedures (25.0%) were the most cited reasons.

Table 6 : Factors Contributing to Prolonged Hospital Stay

Factor	Frequency	Percent (%)
Medical complications	78	30.0
Delays in diagnostics	65	25.0
Lack of hospital resources	55	21.2
Financial constraints	52	20.0
Delays in discharge	10	3.8

Source: Field Data (2024)

Medical complications are the leading cause of prolonged hospital stays, followed by delays in diagnostics and resource shortages. Financial constraints are also a significant factor, affecting patient discharge timelines.

4.4 Financial Status and Healthcare Quality

Respondents highlighted how financial status influences healthcare access and quality. Table 7 illustrates that 51.9% of patients experienced delays in accessing treatment due to financial constraints.

Table 7 : Impact of Financial Status on Healthcare Quality

Financial Impact	Frequency	Percent (%)
Delayed access to treatment	135	51.9
Could not afford medication	82	31.5
Relied on financial aid	43	16.5

Source: Field Data (2024)

Financial challenges are prevalent, with over half of the respondents experiencing delayed access to treatment. This underscores the need for improved financial support systems in healthcare.

4.5 Strategies for Reducing Prolonged Hospital Stays

Table 8 lists the suggested strategies for reducing prolonged hospital stays. Expanding financial aid programs was the top recommendation (54.6%).

Table 8 : Suggested Strategies for Reducing Hospital Stays

Strategy	Frequency	Percent (%)
Expanding financial aid	142	54.6
Improving resource management	74	28.5
Enhancing discharge planning	44	16.9

Source: Field Data (2024)

The majority of respondents believe that expanding financial aid is crucial to reducing prolonged hospital stays. Improving hospital resource management and discharge planning are also seen as vital interventions.

4.6 Performance

The performance of healthcare services at Kenyatta National Hospital was assessed, focusing on operational efficiency and factors contributing to the prolonged stay of patients. The findings are summarized in Table 9, which highlights the key aspects of operational performance.

The operational efficiency, as reported by both patients and healthcare providers, recorded a mean score of 2.8993 with a standard deviation of 1.76527. This indicates that there is potential for improving processes, particularly in areas like patient flow, resource management, and the timely delivery of healthcare services.

Activity scheduling, a critical component in managing patient admissions and discharges, was perceived more positively with a mean score of 3.9712 and a standard deviation of 1.59169. This suggests that scheduling mechanisms at the hospital are functioning relatively well, contributing to more effective patient management.

When it comes to communication between healthcare providers and patients, the mean score for communication with doctors was 3.4173, while communication with patients' families scored 3.3885. Both indicators reflect a moderate level of satisfaction, with standard deviations of 1.74513 and 1.74352, respectively. These results highlight the need for improved communication channels to enhance patient care and facilitate quicker discharges, which would help reduce the duration of patient stays.

Record-keeping and management processes, which are essential for tracking patient data and managing healthcare resources, received more positive feedback with mean scores of 3.8273 for record-keeping and 4.0108 for management and administration. The relatively low variability, as indicated by the standard deviations, suggests that these processes are generally well-managed, though there is always room for improvement in consistency.

In the context of patient education and staff training, the mean score for teaching and learning processes was 3.8705, with a standard deviation of 1.60475. This reflects a moderate level of satisfaction among healthcare staff and patients, suggesting that additional training and education efforts could further improve the overall quality of patient care.

Lastly, the mean score for improved patient outcomes, particularly regarding the reduction of prolonged hospital stays, was 3.6115 with a standard deviation of 1.68669. This mixed response indicates that, while there have been improvements, there is still variability in the effectiveness of interventions aimed at reducing patient stay durations.

Table 9 : Performance Factors Contributing to Prolonged Hospital Stay

Factor	N	Minimum	Maximum	Mean	Std. Deviation
Operational efficiency	278	1.00	5.00	2.8993	1.76527
Activity scheduling	278	1.00	5.00	3.9712	1.59169
Communication with doctors	278	1.00	5.00	3.4173	1.74513
Communication with patients' families	278	1.00	5.00	3.3885	1.74352
Record keeping	278	1.00	5.00	3.8273	1.54325
Management and administration	278	1.00	5.00	4.0108	1.55172
Teaching and learning (patient education)	278	1.00	5.00	3.8705	1.60475
Improved patient outcomes	278	1.00	5.00	3.6115	1.68669

Source: Field Data (2024)

The performance findings suggest that while operational processes and activity scheduling are functioning reasonably well, areas such as communication and patient education still require

attention. Improvements in these areas could lead to shorter hospital stays and enhanced patient satisfaction.

4.6 Inferential Analysis

4.6.1 Correlations on Key Factors

A correlation analysis was conducted to explore the relationships between key factors such as operational efficiency, communication, record-keeping, and patient discharge times. Significant relationships were identified between these variables.

A strong positive correlation was observed between communication effectiveness and operational efficiency ($r = .589$, $p < .001$), indicating that improved communication between healthcare providers and patients contributes to better operational performance.

Additionally, a positive correlation was found between activity scheduling and reduced patient stay durations ($r = .323$, $p < .001$), suggesting that effective scheduling systems are crucial in managing patient flow and reducing prolonged hospital stays.

Record-keeping also showed a positive correlation with overall operational efficiency ($r = .492$, $p < .001$), indicating that well-maintained patient records support smoother healthcare delivery and discharge processes.

Table 10 : Correlations on Key Factors

Variable	Operational Efficiency	Communication	Activity Scheduling
Operational Efficiency	1	.589**	.323**
Communication	.589**	1	.300**
Activity Scheduling	.323**	.300**	1

Source: Field Data (2024)

Note: **p < 0.01**

The positive correlations demonstrate the importance of communication and activity scheduling in enhancing operational efficiency at Kenyatta National Hospital. These findings suggest that addressing communication gaps and improving scheduling systems can lead to reduced hospital stay durations.

4.6.2 Correlations Against Performance

A separate correlation analysis was conducted to examine the relationships between the identified key factors and overall hospital performance, specifically in relation to reducing patient stay durations.

Communication and operational efficiency both had positive correlations with hospital performance, though the relationship was weaker (**r = .160**, **p < .01**). This suggests that while these factors contribute to performance improvements, other variables such as resource availability and patient care protocols may also play a role.

Table 11 : Correlations Against Hospital Performance

Variable	Operational Efficiency	Communication	Activity Scheduling	Hospital Performance
Operational Efficiency	1	.589**	.323**	.160**
Communication	.589**	1	.300**	.037
Activity Scheduling	.323**	.300**	1	.041

Source: Field Data (2024)

Note: **p < 0.01**

The weak positive correlation between these factors and overall performance highlights the need for a comprehensive approach to addressing the factors leading to prolonged patient stays. Improvements in operational efficiency and communication should be complemented by efforts to address other systemic issues such as resource management and staff-patient ratios.

4.6.3 Model Summary

The model summary in Table 12 provides insights into how well the predictor variables (communication, activity scheduling, operational efficiency) explain the variation in hospital performance.

The R value of .250 indicates a weak positive relationship between the predictors and hospital performance. An R^2 value of .063 suggests that approximately 6.3% of the variation in hospital performance is explained by these predictors, indicating that other factors not included in the model may be influencing performance outcomes.

Table 12 : Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.250	.063	.049	6.11827

Source: Field Data (2024)

The model suggests that the key factors examined contribute only marginally to the overall hospital performance. This implies that additional variables, such as hospital infrastructure, staffing levels, and patient care protocols, may play a more significant role in influencing patient outcomes.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the findings from the data analysis, provides conclusions based on the study's objectives, and offers recommendations for improving healthcare delivery and addressing prolonged hospital stays.

5.1 Summary

The study identified several key factors contributing to prolonged hospital stays at Kenyatta National Hospital, with medical complications and delays in diagnostics leading the list. Financial constraints played a significant role in delaying treatment, thereby prolonging hospital stays. Respondents also suggested various strategies for improvement, including expanding financial aid and better resource management.

5.2 Conclusions

1. **Factors Leading to Prolonged Stays**

   Medical complications, delays in diagnostics, and lack of resources are the main contributors to prolonged hospital stays. Addressing these issues can lead to a reduction in patient stay duration.

2. **Financial Impact on Healthcare Quality**

   Financial constraints significantly impact healthcare access, leading to delays in treatment and medication. Patients with limited financial resources are more likely to experience prolonged hospital stays.

3. **Suggested Strategies for Reducing Hospital Stays**

   Expanding financial aid, improving hospital resource management, and enhancing discharge planning are necessary steps to reduce the length of hospital stays and improve healthcare outcomes.

5.3 Recommendations

1. **Expand Financial Support Programs**

   The government and healthcare institutions should implement more comprehensive financial aid systems to assist low-income patients in accessing timely treatment.

2. **Improve Hospital Resource Management**

   Hospitals should optimize their resource management practices to ensure timely diagnostics and reduce delays in treatment, which contribute to longer hospital stays.

3. **Enhance Discharge Planning**

   Hospitals need to streamline discharge planning processes to prevent unnecessary delays in discharging patients, thereby freeing up hospital beds and improving patient turnover.

4. **Increase Training on ICT Usage**

   Continuous training on ICT for healthcare providers is necessary to enhance their efficiency in managing patient care, thereby reducing delays in treatment.

5.4 Recommendations for Further Research

Further studies should focus on the long-term effects of financial constraints on patient outcomes and explore the impact of ICT integration in improving hospital management efficiency.

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QUESTIONNARES

Factors Leading to Prolonged Stay of Patients in Kenyatta National Hospital

Introduction

Dear Respondent,

We are conducting a study to investigate the factors contributing to prolonged hospital stays at Kenyatta National Hospital. Your participation in this questionnaire will help us gather crucial information. All responses will remain confidential.

Section A: Demographic Information

1. **Age**:
    - 18–25 []
    - 26–35 []
    - 36–45 []
    - 46–55 []
    - 56 and above []
2. **Gender**:
    - Male []
    - Female []
    - Prefer not to say []
3. **Level of Education**:
    - No formal education []
    - Primary school []
    - Secondary school []
    - Diploma []
    - Bachelor’s degree []

- Postgraduate degree []

4. **Employment Status**:
    - Employed []
    - Self-employed []
    - Unemployed []
    - Retired []
5. **Monthly Income (KSh)**:
    - Below 10,000 []
    - 10,000–30,000 []
    - 30,001–50,000 []
    - Above 50,000 []

Section B: Factors Contributing to Prolonged Hospital Stay

(Related to Objective 1)

6. **Reason for Hospitalization**:
    - Surgical procedure []
    - Chronic illness []
    - Accident or emergency []
    - Other (please specify): _____
7. **How long have you been hospitalized?**
    - Less than 1 week []
    - 1–2 weeks []
    - More than 2 weeks []
8. **Have you experienced any delays in receiving your treatment or tests?**

- Yes []
- No []

9. **If yes, what were the reasons for the delay? (Choose all that apply)**
    - Lack of hospital beds []
    - Lack of medical supplies []
    - Delays in diagnostic tests []
    - Financial constraints []
    - Other (please specify): _____

10. **Have you experienced any complications during your stay?**

- Yes []
- No []

11. **Do you have any pre-existing conditions (e.g., diabetes, hypertension)?**

- Yes []
- No []

Section C: Financial Status and Its Impact on Healthcare Quality

(Related to Objective 2)

12. **How would you rate your financial capacity to cover your medical expenses?**

- Very low []
- Low []
- Moderate []
- High []
- Very high []

13. **Have financial constraints affected your access to treatment or medical procedures?**

- Yes []
- No []

14. **If yes, in what way have financial issues impacted your hospital experience? (Choose all that apply)**

- Delayed treatment []
- Could not access medications []
- Could not afford follow-up care []
- No impact []
- Other (please specify): _____

15. **Did you have to rely on external financial support (family, friends, organizations) to meet medical costs?**

- Yes[]
- No []

Section D: Dimensions of Healthcare Quality Affected by Financial Constraints

(Related to Objective 3)

16. **Did financial difficulties prevent you from accessing necessary services (e.g., tests, surgeries)?**

- Yes []
- No []

17. **How satisfied are you with the quality of healthcare services provided during your stay?**

- Very dissatisfied []
- Dissatisfied []
- Neutral []

- Satisfied []
- Very satisfied []

18. **Were there delays in receiving diagnostic tests or treatment due to financial issues?**

- Yes []
- No []

19. **How has financial constraint impacted your overall treatment outcome?**

- Worsened my condition []
- Delayed recovery []
- No effect []
- Improved my condition []

20. **How satisfied are you with the level of care and attention received from healthcare staff?**

- Very dissatisfied []
- Dissatisfied []
- Neutral []
- Satisfied []
- Very satisfied []

Section E: Recommendations for Reducing Prolonged Hospital Stays and Addressing Financial Disparities

(Related to Objective 4)

21. **What do you think are the key factors that caused the prolongation of your hospital stay? (Choose all that apply)**

- Delays in treatment []
- Financial constraints []

- Lack of hospital resources []
- Complications during treatment []
- Other (please specify): _____

22. **What strategies do you believe could help reduce prolonged hospital stays at Kenyatta National Hospital?**
    (e.g., faster diagnosis, increased financial support, improved hospital facilities)

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23. **What can be done to address the financial challenges patients face when seeking healthcare at public hospitals?**

Thank you for your time and participation!!