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# Exploring hand hygiene practices among healthcare workers in Ruiru Sub-County hospital

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**BEDSIDE RATIONING BY FRONTLINE HEALTHCARE WORKERS: A CASE  
STUDY OF ST. FRANCIS COMMUNITY HOSPITAL**

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MBA/HCM/ 093607**

**Submitted in partial fulfillment of the requirements for the award of a Master's  
in Business Administration Health Care Management.**



**Strathmore Business School**

**May 2018**

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**Grace Wanjiru**

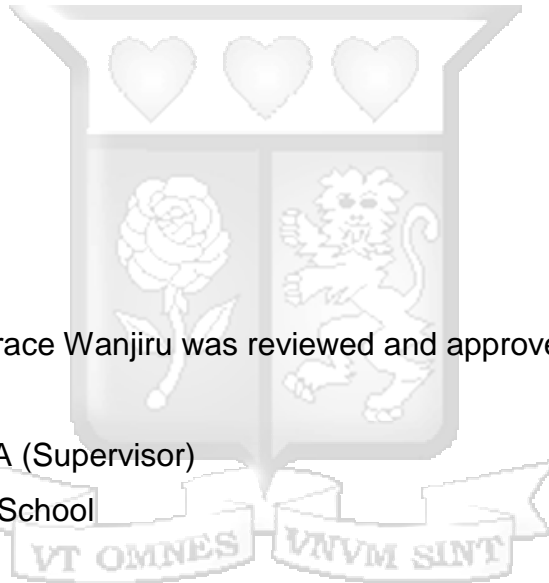
May 2018

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## **ABSTRACT**

Studies on bedside rationing in developing countries such as Kenya are scanty. Bedside rationing entails implicit or explicit withholding of essential healthcare services from clients. The existing literature on bedside rationing in developed countries cannot be generalized to middle-income countries because of contextual differences. This study examined bedside rationing among frontline healthcare workers in St. Francis Community Hospital, which is a faith-based hospital located in Nairobi County off the main Thika Highway 2 kms to Kasarani Mwiki Road in Kenya. The study used an explorative case study methodology and collected data using in-depth qualitative interviews. A purposive sample of 10 nurses was selected. A thematic analysis approach was used for data analysis. The study found that four forms of bedside rationing are practiced at St. Francis Community Hospital. The rationing includes deflection, deterrence, delay, and termination. Medical, patient, and hospital-related considerations determine the criteria used for bedside rationing. Additionally, factors affecting bedside rationing include unavailability, resource optimization policies, and skill empowerment at the management and operations levels. Bedside rationing was reported to compromise the quality of care provided at the hospital. Hiring more specialized doctors and nurses, providing extra beds, construction of new wards, new sources of funding, collaboration with medical training institutions and more support from the government to deal with negative effects of bedside rationing were reported as possible ways to reduce the negative effects of bedside rationing on care delivered. The study recommends development of new resource optimization guidelines consultation nurses. The hospital should undertake ethical rationing training to maintain quality of the care services. Financial partnership and liaising with the government for resource allocation will be imperative. St. Francis Community Hospital offers complimentary services during strike. Future studies should focus on bedside rationing decisions among frontline healthcare workers in public hospitals and other faith-based hospitals.

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## DEDICATION

I dedicate this thesis to my beloved family and a network of reliable friends who have continued to support me throughout the challenging learning period. Family and friends have made realize the essence of relying in people who can offer critical lessons that have influential in my growth as well as development.



## OPERATIONAL DEFINITIONS

- i. **Bedside Rationing**– Act of withholding essential medical service by frontline healthcare workers due to costs, treatment, and service delivery issues
- ii. **Developed Nations**- High income countries according to the World Bank classification
- iii. **Developing Nations**-Low and middle income countries according to the World Bank classification
- iv. **Frontline Health Workers**- the health workers such as nurses who provide direct services to the patients in hospitals and community-based centers
- v. **Quality of Care**- degree to which health care services for persons or population meet the desired outcomes



# 1 CHAPTER 1: INTRODUCTION

## 1.1 Background to the Study

Bedside rationing refers to the explicit and implicit withholding of essential healthcare services from patients at the interface with frontline healthworkers (Strech & Danis, 2014). The term denotes the act of assigning certain healthcare services considering the growing gap between effective medical interventions and available resources in the healthcare institutions. Physicians and caretakers advocate for rationing the advocacy and distributing societal resources to maximize carerespectively(Antiel, Curlin, James, & Tilburt, 2013).

Although the concept of bedside rationing is known in the healthcare practice, current literature has focused on whether healthcare practitioners should undertake rationing or abandon it. Bedside rationing occurs in six forms including denial, deflection, deterrence delay, dilution, and termination. According to Kapiriri & Martin (2007), developed or developing countries grapple with denial, delay, and termination, which are most austere forms of bedside rationing.

Denial refers to the exclusion of possible beneficiaries from the essential treatment due to obstructive eligibility for accessing care(Strech & Danis, 2014). Deflection entails directing potential care beneficiaries to other alternatives rather than those provided by the healthcare facilitates but with the aim of saving resources. On the other hand, deterrence involves healthcare practitioners discouraging patients from accessing services, which informs screening, and recommendation for referral when thecost of careis high (Antiel et al., 2013). Delay entails discouraging the beneficiaries from getting essential services through long-waiting times while dilution encompasses spreading resources widely to cover would-be beneficiaries. Termination involves practitioners' withdrawal of essential treatment from patients.Different health facilities and practitioners have the discretion to set priorities needed to deliver beneficial services to the patients. However, Magelssen, Nortvedt, & Solbakk (2016) argue that the priorities have to be set with the

understanding of scarcity of healthcare resources especially in middle-income countries like Kenya. The number of waiting lists for surgeries, cuts in compensations, drug expenses, limited medical consultations, and foreclosure of healthcare services are evident that indeed rationing occurs(Defaye et al., 2015). Bedside rationing occurs at the micro level where the patients deal with the consequences of misallocation of relevant healthcare resources.

## **1.2 ProblemStatement**

Bedside rationing can compromise the quality of care. Frontline workers can prevent or frustrate the would-be beneficiaries of care (Young et al., 2012). Some of the workers undertake recommend referrals and carry out procedures due to limited resources without following the due process of consulting the patients or their caretakers (Hurst et al., 2006). The preferences of the frontline workers such as nurses'end up preceding the quality of care owed to the patients, which is unethical and against the continuum of care as per Young et al. (2012). Consequently, the patients become exposed to high morbidity and even mortalities.

Numerous studies have been conducted on bedside rationing in healthcare, but they are limited to facilities in developed countries. Additionally, current research shows diverse and complex healthcare rationing, which becomes difficult to define particularly due to resource scarcity in developing countries (Kapiriri & Martin, 2007). The findings of the current studies cannot be generalized for developing countries like Kenya particularly due to the difference in context. This research fills the information gap by evaluating bedside rationing from the perspective of St. Francis Community Hospital in a middle-income country. The findings should help in allocating healthcare fairly to patients within St. Francis Community Hospital and other facilities facing the same concern.

Studying bedside rationing is important because it helps to address the ethical controversy surrounding decision-making at the frontline. The morally permitted rationing of care remains debatable among different factions of the healthcare

industry (Hurst et al., 2006). Currently, researchers have failed to reach consensus on the ethical principles that should guide practitioners within the limits of patients, hospital, and medical-related aspects. Some consider a cost-quality trade-off precedes the medical issues that define rationing (Magelssen, Nortvedt & Solbakk, 2016). Many medical practitioners are reluctant to address their readiness to prioritize on issues such as costs or quality of care outcomes during clinical decision-making.

Therefore, the diversity and complexity of bedside rationing in middle-income countries has not been defined well in research. The forms of bedside rationing, criteria, and implications of bedside rationing on patient outcomes have not been determined from the perspective of St. Francis Community Hospital, which is representative of hospitals operating with limited resources

### **1.3 Research Objectives**

The overall objective of the study is to examine the practice of bedside rationing by frontline healthcare workers at the St. Francis Community Hospital.

#### **1.3.1 Specific Objectives**

- i. To identify the forms of bedside rationing by practiced nurses at St. Francis Community Hospital
- ii. To examine the criteria that are used by nurses to implement bedside rationing
- iii. To identify the factors that influence bedside rationing decisions by nurses
- iv. To explore the effects of bedside rationing decisions on care the received by patients

### **1.4 Research Questions**

The following questions formed the basis for answerable inquiry into bedside rationing at St. Francis Community Hospital.

### **1.4.1 Main Research Question**

What bedside rationing approach do frontline healthcare workers use at St. Francis Community Hospital?

### **1.4.2 Specific Research Questions**

- i. What forms of bedside rationing do nurses use at St. Francis Community Hospital?
- ii. What criteria used that influence bedside rationing decisions by nurses at St. Francis Community Hospital?
- iii. What are the effects of bedside rationing on the care received by patients at St. Francis Community Hospital?

### **1.5 Scope of the Study**

The study is designed to describe bedside rationing from the standpoint of nurses in a hospital located in a middle-income country, Kenya. The primary concern is to establish the bedside rationing decisions in the hospitals, which could be different from what the current literature have described in developed nations. Consequently, the study focuses on the type of decisions, the decision-making procedure, and hospital, medical or patient-related considerations guided by the perspectives of the frontline healthcare workers at St. Francis Community Hospital. The insights from the study represent the views of the healthcare practitioners rather than the entire health facility. The study represents the views of the administration or community.

### **1.6 Significance of the Study**

The study is important because it help in demonstrating the difference between bedside rationing decisions by frontline healthcare workers in a middle-income country and the developed countries documented in the current literature. Frontline healthcare workers will understand the forms of bedside rationing, the criteria, and the implications on the outcomes of the patients who receive the service

The research provides contextual information to healthcare practitioners and government through which rationing decisions at the bedside can be compared with the standard procedures outlined in the healthcare literature. Understanding the

bedside rationing decisions assists in determining the consequences related to patient outcomes due to different bedside rationing decisions. Consequently, the understanding should foster resource allocation and review of existing policies in private and public institutions.

The results assist researchers in revising the current bedside rationing guidelines so that the framework could contain resource-sensitive clinical procedures and decision-making processes. The clear guidelines nurture evidence-based and patients' understanding of reasons as well as the foundation for rationing decisions at St. Francis Community Hospital as well as other faith-based community hospitals.



## **2 CHAPTER 2: LITERATURE REVIEW**

The following chapter contains a review of existing literature on bedside rationing. The chapter offers a definition of priority setting in healthcare and bedside rationing within the context of developed and a few developing countries. The review contains empirical and theoretical reviews as well as conceptual framework used to outline variables for the research.

### **2.1 Introduction**

#### **2.1.1 Priority Setting in Healthcare**

Bedside rationing is a subset of priority setting in healthcare. According to Barasa, Molyneux, English, & Cleary (2015), priority setting entails the distribution of resources among competing initiatives, patients, and patient groups. The definition acknowledges the healthcare demand, which surpasses the resources available. The healthcare demand and resource scarcity puts pressure on decision-makers to target the healthcare resources effectively (Kapiriri & Martin, 2007). Therefore, accountability and responsibility in the way healthcare institutions utilize their resources such as drugs is critical because the effect causes possible disruption on overall patient outcomes (Barasa et al., 2015).

Priority setting has three levels including macro, meso, and micro levels. The macro-level refers to the decisions made at the national or system-wide level, which predisposes the resource allocation to influence by politics, advocacy, and public pressure (Clark & Weale, 2012). On the other hand, the meso level encompasses sub-national and organizational level processes such as hospital priority-setting decisions made by hospital managers. According to Kapiriri & Martin (2007), the decisions should be based on evidence, guidelines, and the national priorities to achieve inclusivity, acceptability, and transparency in healthcare delivery. Micro-level priority setting occurs at the bedside or during clinical programs. Proper decision-making depends on how well frontline healthcare workers are engaged at all levels including bedside rationing (Robinson, Williams, Dickinson, & Freeman, 2012).

### **2.1.2 Bedside Rationing as a Form of Priority Setting**

Kapiriri & Martin (2007) define bedside rationing as implicit or explicit withholding of essential healthcare services from clients. The withholding behavior occurs due to the expanding gap between the available resources and the effective medical interventions. Frontline healthcare practitioners have the responsibility to assume the dual role of advocating for patients' satisfaction while acting as caretakers of the system-wide resources. Papastavrou, Andreou, & Efstathiou (2013) view bedside rationing from the perspective of nursing care as failure to undertake the aspects of care due to the limitation of time, skill, and time. The study found that some of the rationed care issues include patient ambulation, communication with patients, families, and mouth care but due to nurse-patient workload.

Consequently, the review by Papastavrou et al. (2013) established that frontline workers have a significant responsibility in the determination of rationing decisions. Assessment of bedside rationing by Young, Brown, Truog, & Halpern (2012) provided a simplistic meaning by associating the concept to making allocation decisions. The decisions translated into transparency, professional, and effective health care delivery with the intensive care units but the operationalization of the allocation processes is a dilemma for some nurses or frontline workers. Guided by the greatest amount of contact between frontline healthcare workers and patients, providing quality care is essential as it has implications on the overall safety and quality of the entire healthcare system. Bedside rationing emerges as an integral element of care outcomes.

### **2.1.3 Importance of Bedside Rationing**

The administration of bedside rationing has the potential to compromise the quality of care. Young et al. (2012) found that frontline workers such as nurses are forced to deliver healthcare services amidst the scarcity of resources. Given the discretion of the workers in making allocation decisions, Young et al. (2012) noted the possibility of poor service delivery when the process lacks transparency. Kapiriri & Martin (2007) associated the probable compromise on quality health care to the

strict hospital and institutional guidelines, which hardly prioritize proper decision-making to maximize patients' demand for quality healthcare.

Kapiriri & Martin (2007) further noted that any study on bedside rationing would help in addressing the equity implications of the phenomenon. The study established the compelling role of physicians in the complex Ugandan healthcare system. Although Kapiriri & Martin (2007) noted significant effort to streamline the bedside rationing decisions, there was apparent discrimination on the patients who receive consideration for theatre as well as treatment. According to Papastavrou, Andreou, Tsangari, Schubert, & De Geest (2014), the level of bedside rationing helps healthcare institutions in offering efficient and fair service delivery to patients.

Studying bedside rationing would further help to understand the ethical challenge it presents to the clinicians. Scheunemann & White (2011) noted that the discretion to ration some medicine or treatment does not translate into an ethically justifiable decision. Physicians have to find the ethical balance between the competing ethical goals, which complicate the development of explicit rationing guidelines. The collective effort to deny moral responsibility and failing to use public engagement or transparency taints the fair processes associated with rationing as observed by Scheunemann & White (2011).

## **2.2 Theoretical Review**

Many theories address the concept of bedside rationing but utilitarianism and systematic ethical decision models have the best ideas of the phenomenon. Different authors under utilitarianism and systematic ethical decision models have conceptualized bedside rationing.

### **2.2.1 Utilitarianism Theory**

Utilitarianism theory emerges as one of the reasonable notions of justice expected in bedside rationing. The theory requires frontline healthcare workers to think through the specific healthcare rationing problem to make sound judgments (Scheunemann & White, 2011). The primary aim of utilitarianism is to

help practitioners maximize the overall benefits but at the societal level. The physicians might have the professional autonomy and healthcare guidelines of the hospital in mind, but the ultimate responsibility lies in the conservation of resources at the macro-level.

According to Scheunemann and White (2011), utilitarianism proposes a bedside rationing approach where physicians contemplate on the consequences of services and allocation of resources to the overall quality of care. However, utilitarianism underpins the primacy of the society as opposed to creating the right balance between the patients' interests and the societal resources (Pinho & Borges, 2015). The views further emerged from Scheunemann and White (2011) who noted that the model does not provide the best approach for physicians seeking to deal with role conflicts as well as contemplating on the best method for cultivating the quality of life of the patients. Therefore, utilitarianism addresses the objective one and three, which aim to establish forms of bedside rationing and factors influencing the rationing used by nurses at St. Francis Community Hospital

### **2.2.2 Systematic Ethical Decision making Model**

Systematic ethical decision model does not promote the fulfilment of expectations of healthcare organizations, society or the patients but a decision-making about medical treatments based on value judgments and medical expertise (Winkler, Hiddemann, & Marckmann, 2012). Consequently, any dissent between the physician and patients should involve the best course of action reflecting medical or normative decisions. The theory proposes practical criteria, which seeks to inform decisions on patients' requests for quality intervention or treatment.

According to Winkler, Hiddemann, & Marckmann (2012), the criteria include the expected effectiveness of the intervention, benefit-harm ratio, and patients' comprehensiveness of their medical situation. However, systematic ethical decision making model considers conditions of scarcity in bedside rationing process, which informs inclusion resources required for the treatment. The resources may inform the decision for the treatment, likelihood of success based on the benefit-harm ratio.

The systematic ethical decision model presents five guiding questions as shown in Figure 1, which outlines the decision pathway viable for a bedside rationing process.



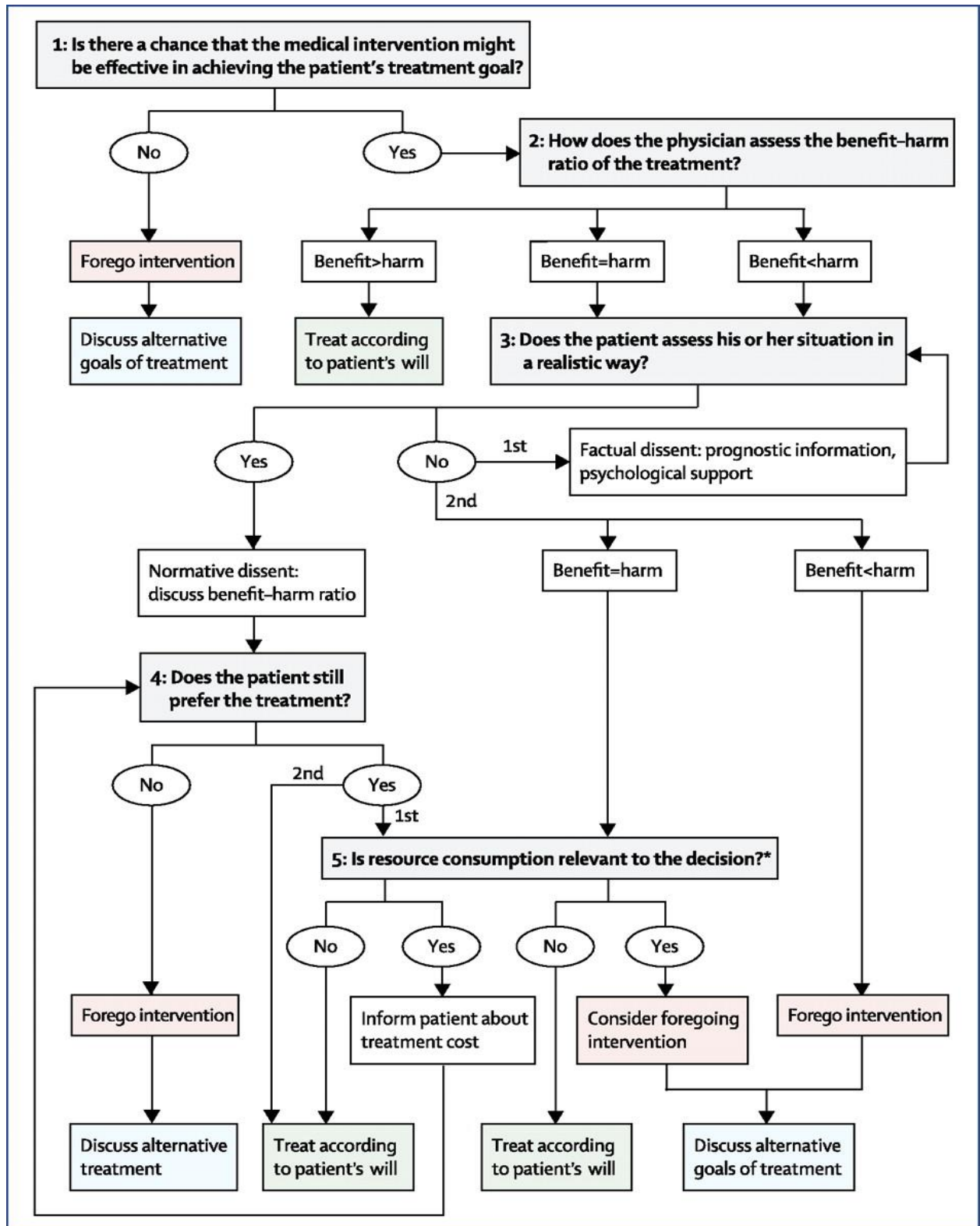


Figure 1: Five Questions in Systematic Decision-Making Model (Winkler et al., 2012)

The theory envisions how physicians determine the medical intervention according to the treatment goals and the subsequent benefit-harm ratio. The process aligns with the professional autonomy and patient interests decisions in bedside rationing process. By evaluating patient interests in the intervention, they acknowledge situations that could warrant prioritization of patients as opposed to conserving resources of the hospital. Nevertheless, the model requires contemplation on the relevance of the resource consumption in the decision-making process, which seeks to solve the role conflicts aspect of bedside rationing. Consequently, systematic ethical decision model has a more explicit and overarching view of bedside rationing decision than utilitarianism. The model becomes the basis for the following conceptual framework (Figure 2) aimed at guiding the prospective research process. The systematic model of decision-making addresses objective two and four, which aim to establish the criteria used for bedside rationing and implications on the patient receiving the service.

## **2.3 Empirical Literature Review**

### **2.3.1 Forms of Bedside Rationing**

Although empirical studies on bedside rationing among healthcare practitioners in developing countries are scanty, Kafiriri & Martin (2007) identified six forms of bedside rationing when they undertook a case study in Ugandan Hospital. An in-depth analysis of interview responses from 40 doctors and 16 nurses identified denial, deflection, deterrence, delay, dilution, and termination of the forms bedside rationing. Kafiriri & Martin (2007) found integral decision making from the frontline healthcare practitioners but the ultimate decisions depended on the medical and hospital related considerations. The forms of bedside rationing emerged as complex and difficult, which make the transparency expected in the process as argued by (Ubel & Goold, 1997)

Ubel & Goold (1997) undertook a review as opposed to an empirical study to recognize bedside rationing. The study aligned with the findings of Tilburt & Cassel (2013) and Stark (2011) that frontline practitioners make clear and tough calls when

withholding or providing beneficial services to patients. However, the study presented three conditions, which doctors and nurses should meet before qualifying to undertake any form of bedside rationing. The conditions include clinical judgment informed by patients' best medical interests, promoting the financial interest of the institution, and sufficient control over the medically beneficial service (Cohen, 2012). However, findings were from a developed country, which limits generalization to frontline healthcare workers from the middle-income nation.

### **2.3.2 Criteria Used in Bedside Rationing**

Although studies by Kipiriri and Martin (2007) and Ubel and Goold (1997) recognize bedside rationing, current clinical research has established criteria for undertaking the decision-making process. The criteria defined in research aims to reduce the biases, which Ubel and Goold (1997) identified as vulnerabilities to silent or implicit rationing. Contrastingly, Jones, Hamilton, and Murry (2015) found nurses decide on patients who should get treatment first. The findings were based on a systematic review of 42 scientific reports. However, the mismatch between available resources may require focus on incoming patients rather than the referred or chronically ill patients.

A perspective of the middle-income country like Uganda by Kipiriri & Martin (2007) expanded the findings of Jones et al. (2015) by establishing a treatment-based criterion. The case study of a tertiary hospital in Uganda showed that doctors determine what treatment is best for the patients, but the nurses have to confirm the availability of drugs to shape denial, delay, or deterrence for the patients. Barasa et al. (2015) argued that bedside rationing might require consideration of financing arrangements and resource availability. Nonetheless, Bloche & Jacobson (2000) opined that the protocol for decision-making should be informed by practitioners' loyalty to the patients and state wishes to distribute its resources. Ubel (2007) revealed that indeed patients receive quality treatment or service irrespective of constraints of the systems but from the perspective of U.S. platform as opposed to a hospital with limited resources. However, certain factors have been found to have an influence on bedside rationing.

### **2.3.3 Factors Influencing Bedside-Rationing Decisions by Nurses**

Kapiriri & Martin (2007) found that hospital, patient, and system related considerations influence the bedside rationing. Schwappach and Koeck (2004) agree the considerations are critical as long as the information is disclosed to the patients. Hospital considerations emerged as integral factors in a Ugandan hospital, where the rationing occurred guided by the underfunding, healthcare workers shortage, beds, drugs, and sundries. The research by Kapiriri and Martin (2007) established medically related factors include such as severity of the patient condition and ability to benefit from rationing as the primary issues determine prioritization of treatment. Ubel (2007) presented a more applicable account from a bedside rationing as opposed to relying on information from doctors who might fail to execute the decisions as required.

According to Ubel (2007), patient-related factors are essential for any frontline healthcare seeking to meet the expectations of the hospital and system on quality service delivery. The confessions might not have followed the required empirical framework of research, but they helped to affirm bedside rationing should conform to the protection of patients with high vulnerable, poor, and minimally socially supported. Additionally, Uber (1995) argued that the sensitivity of children might require prioritization over the adults during admissions or referral to operating rooms.

Another empirical study by Ubel & Goold (1998) revealed moral hazard issue as an antecedent for any bedside rationing decisions. While the study was based on responses from practitioners in a developed country, the morality of bedside rationing emerged as an imperative determination of the decisions made in the hospitals. Ubel & Goold (1998) noted the physicians protect the best interests of patients and hospitals, especially when only marginally beneficial health services can be offered.

## **2.4 Influence of Bedside Rationing On Resource Allocation and Treatment of Patients**

Frontline healthcare workers make rationing decisions within the constraints of the resources availability and treatment based on their judgment. Pellegrino (1994) argued that physicians face the dilemma of treating patients who have inadequate financial resources. The research acknowledged the need for sustaining the patient care relationship when undertaking rationing but without disregarding the proper conservation of resources or the costs. Furthermore, the findings showed that diagnostic and therapeutic measures are essential for physicians but economical use of resources is critical in the dispensation of any form of bedside rationing.

Another study by Schafer (2001) extended the findings of Pellegrino (1994) by associating resource allocation as an ethical issue rather than greater good of the American and Canadian healthcare system. The research recognized that bedside rationing should occur with medical resource scarcity or expensiveness in mind. Strech and Danis (2014) established a clearer procedure through physicians allocate scarce resources at the bedside. The systematic review found role conflict because physicians have to conform to patient advocacy and cost containment obligations. The review found studies that emphasized implicit decisions, which grant physicians discretion and others promoted an explicit approach to look beyond physician-client relationship at the bedside.

Lauridsen (2009) carried out a study on bedside rationing cognizant of the role conflict facing physicians. He proposed administrative gatekeeping to strike a balance between unrestricted patient advocacy and other implications of bedside rationing such as unfairness, moral hazard, and distrust. The study viewed administrative gatekeeping as the means for introducing patient treatment actions that eliminate inequalities and while abiding by the rules set by higher organizational levels within a healthcare system. Correspondingly, Sulmasy (2007) noted that the treatment, justice, and value of life could not be equated to cost containment during

a study on rationality in the management of cancer care. Ultimately, there may be need to establish a balanced bedside rationing.

#### **2.4.1 Impact of Bedside Rationing on Quality of Care of Patients**

Sulmasy (2007) noted that the cost containment aspect of bedside rationing prevents physicians from executing the principle of justice to the patients. The study raised an argument that individual practitioners are prone to executing dissimilar rationing, which increases the susceptibility of patients to morbidity and the mortality. Therefore, the provision for saving corporate or community resources is essential, but bedside rationing could impede the delivery of healthcare services to the primary target. Lauridsen (2009) studied resource allocation aspect and found the process as unfair to the primary beneficiaries as established by (Sulmasy, 2007).

According to Lauridsen (2009), equal medical claims from the patients elicit equal moral claim, but the healthcare practitioners have to establish a sense of balance in the distribution of resources. Although scarcity could drive physicians to need to withhold essential services to the learners, distributive justice necessitates a healthcare system that achieves high patient satisfaction. Strech, Synofzik, and Marckmann (2008) were more explicit than Lauridsen (2009) as they found the association between deliberate physician decisions to abandon physician advocacy due to role conflict while upholding the responsibility to conserve the limited resource of an institution. Consequently, the study established that tension between physician's interests and patients' needs complicate the achievement of quality healthcare, for example, when the decision involves denial of urgent admission to the operating room.

#### **2.5 Summary of Gaps**

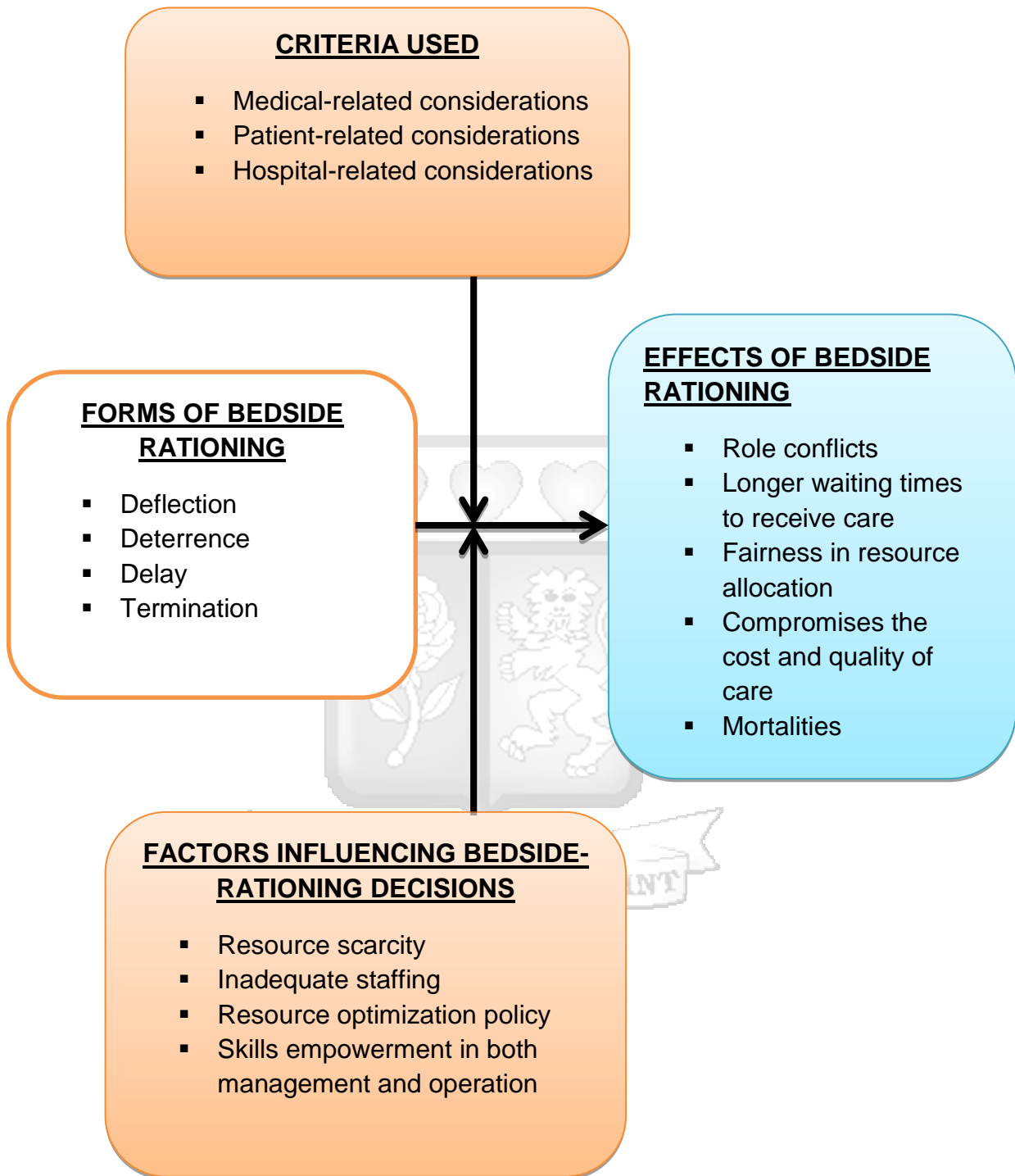
Current research acknowledges rationing as a challenge to allocation ethics of frontline healthcare workers in developed countries. Issues such as role conflict are acknowledged in the studies, which further recognize the intricate decision-making due to multiple accountabilities of the physicians. Additionally, the tension between

professional autonomy and healthcare guidelines at the national level complicates the achievement of the ultimate patient outcomes. However, much of the empirical evidence has been drawn from developed countries. Only Kafiriri and Martin (2007) provided a comprehensive case of bedside rationing in Ugandan Hospital. Carrying out further research to establish more satisfactory and representative perspectives of bedside rationing in a middle-income country like Kenya. Utilitarianism theory and systematic ethical decision models guided the research.

## **2.6 Conceptual Framework**

Drawing from the literature review, this study adopts a conceptual framework (Figure 2) that classifies bedside rationing as comprising of, dilution, deterrence, delay and termination. A frontline healthcare worker has to consider hospital, patient, and medical-related considerations and confront influential factors such as staffing challenges, resource scarcity, resource optimization policy, and skills empowerment in both management and operations. The conceptual framework assumes that the combination of these forms of bedside rationing may influence the cost and quality of care, fairness in allocation of resources, longer waiting times, role conflicts, and mortalities.





**Figure 2: A Conceptual Framework on Bedside Rationing**

## **3 CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Research Design**

#### **3.1.1 Exploratory Case Study**

The study used an exploratory case study to establish bedside rationing decisions made by nurses at St. Francis Community Hospital. A case study research refers to the up-close and in-depth examination of a subject and its contextual conditions (Parahoo, 2014). The case study involved an in-depth analysis of the bedside rationing for a hospital that services a middle-income population within an urban residential area in Nairobi, Kenya. Given that studies on bedside rationing among healthcare practitioners in Kenya are scanty, an exploratory case study investigates the distinct phenomena to fill the existing preliminary research gap.

The advantage of using case studies is collecting and analyzing data based on the context of the phenomenon under study (Andrew & Halcomb, 2009). The study was undertaken within the boundaries of St. Francis Community to establish diverse perspectives on bedside rationing by the nurses. The case study methodology was chosen because it allows for thorough and in-depth investigation as well as exploration.

### **3.2 Research Philosophy**

#### **3.2.1 Interpretivism Paradigm**

Interpretivism philosophy underpinned the research as it allows meaning-making practices that lead to observable outcomes. The research focused on bedside rationing and the extent it determines patient treatment and effect on care in accordance with hospital or system-wide guidelines. Given that interpretivism requires an experience-near perspective, an exploratory case study aligns with the philosophy that views human actors as the focal point of scientific explanation in the form of bedside rationing (Allen, 2012).

According to Allen (2012), interpretivism promotes subjectivity, which could increase research bias. However, the study reduced the room for bias by ensuring the analysis is based on the viewpoint and values established from the nurses at St. Francis Community Hospital. Furthermore, the interpretivist approach enhances trustworthiness and further research validity due to the level of the in-depth investigation it promotes. The philosophy enhances easy data collection within a non-artificial environment.

### **3.3 Study Setting**

The study was conducted at St. Francis Community Hospital. The center is a faith based hospital with 80 nurses. The nurses provided their accounts of bedside rationing as necessitated by the hospital or in accordance with the guidelines set out at the national level. The hospital serves at least 400,000 persons within the vicinity who seek inpatient and outpatient services.

### **3.4 Population and Sampling Design**

The research targeted nurses at St. Francis Community Hospital. A sample of 10 nurses was selected purposefully. The purposive sample was chosen given the constant patient-nurse contact at the hospital. Hence, the nurses offered in-depth response sought in the study. All clinical departments were used to gain deep insights and increase representativeness of the data. The departments included ICU, Outpatient, HDU, Maternity, and Surgical units.

Purposive sampling was used as the study targeted the nurses who work for longer hours and have a wide range of perspective on this study topic. Due to limitation of time and budget constraints (Appendix 4), the researcher conveniently selected nurses in every department who has served the longest time in the hospital, giving a total number of ten nurses as the sample size of the study.

### **3.5 Data Collection Method**

#### **3.5.1 Qualitative Interviews**

Qualitative interviews were used for data collection purposes at St. Francis Community Hospital. A pretested interview guide helped in modifying the interview questions (Appendix 2). The development of the interview tools were informed by the study objectives and conceptual framework. The research focused on appropriate probes so that necessary insights could arise in the course of the interviews. The interviews were recorded in a digital recorder and transcribed in readiness for analysis.

According to Parahoo (2014), interviews fostered a cordial environment as opposed to using focus groups where the group environment can impede constructive conversations. Using interviews furthered evaded the problem of controlling and managing discussions like in focus groups. Furthermore, the tool eased the data collection because it involved recording one participant at a time rather than using focus group settings, which present difficulties in accommodating all speakers.

The advantage of qualitative interviewing is helping the interviewer to record the unique perspective or experience of the respondent (Parahoo, 2014). Therefore, each informant in the study had sufficient time to respond to the different questions on bedside rationing. The interview approach was open-ended and conversational so that the respondents can offer a first-personal account of how they practice bedside rationing decision-making at St. Francis Community Hospital.

## **3.6 Data Analysis Technique**

### **3.6.1 Thematic Analysis**

The data necessitated a thematic analysis as the main data analysis technique. Following the data collection, recording, and transcription of the recorded insights from the qualitative interviews, the principal investigator identified the themes arising from the responses. A deductive thematic framework was used for data analysis as outlined by Nowell, Norris, White, and Moules (2017). The process involved theme development directed by content of the data and the existing concepts or ideas of bedside rationing.

- i. Familiarization with raw data was done. The procedure involved reading and reading data to develop intimate familiarization with its content.
- ii. Following the familiarization with the content of the data, any relevant feature of the data relating to the research question was identified. Consequently, potential themes were searched from the responses of each respondent.
- iii. A review of the themes was then conducted to determine its relation with the other dataset. The intention was to establish of the responses from the 10 nurses were telling a consistent patterns relating to aspects of bedside rationing.
- iv. The review of the themes then facilitated easy definition and naming guide by the three objectives developed for the study. The themes included forms of bedside rationing, criteria used in bedside rationing, factors influencing bedside rationing, effects of bedside rationing decisions on patient care, and minimizing negative effects of bedside rationing
- v. Defining and naming enabled analysis according to the scope and focus of each theme. The procedure further involvedmicro analyzing the results sentence by sentence to affirm the salient themes
- vi. The final phase of the thematic analysis involve compiling the analytic narrative and contextualizing the themes with the existing literature on bedside rationing

### **3.7 Research Quality and Rigor**

A respondent validation process was carried out to improve rigor in the study. A crosschecking process was undertaken to determine the reaction of the participants to the emerging findings from the study. The engagement with the 10 nurses helped to refine the explanations. Additionally, a third party was used to identify gaps and biases, which were then corrected before writing the report, reviewed the report. The researcher further checked the transferability or fittingness of the data provided by determining if it aligned with the research context, setting, and participants.

A meticulous record keeping during the interviews was essential because it ensured consistency and transparency of the data interpretations. The study was also undertaken comparison of interviewees account to ensure varied perspectives on bedside rationing are represented as advised by Leung (2015). Additionally, the study ensured research tools meet the stated objectives to maintain the rigor. The approach-involved use of data collection tools, the interviews, to collect precise and correct information to inform a sound data analysis.

### **3.8 Ethical Considerations in the Research**

#### **3.8.1 IRB Ethical Clearance**

The researcher sought research approval from Strathmore University as necessitated by research that involves human subjects (Appendix 5). The participation was voluntary, but the study sought informed consent from St. Francis Community Hospital as well as the respondents (Appendix 1). The data from the qualitative interviews was kept private, confidential, and anonymous.

### 3.9 Dissemination and Utilization of Results

The researcher prepared copies of the final research report and present to the St. Francis Community Hospital management. The management should assess and discuss results and recommendations to determine how it could inform policy development.

Brief flyers were be prepared and distributed to classmates. The students identified with the findings and consider the gaps noted in the research as the basis for their future research.

An executive summary should be sent to publication journal. The summary will initiate the process of assessing the research in readiness for publication in peer-reviewed platforms.



## 4 CHAPTER 4: RESEARCH FINDINGS

### 4.1 Introduction

This chapter contains sections that cover forms of bedside rationing, criteria used in bedside rationing, factors influencing bedside rationing decisions, effect of bedside rationing decisions on patient care, and ways of minimizing negative effects of bedside rationing at St. Francis Community Hospital.

### 4.2 Demographic Information

The following table summarizes the demographic information of the respondents.

**Table 1: Demographic Information of the Respondents**

<b>Nursing Unit</b>	<b>Number</b>	<b>Age</b>	<b>Working Period</b>
<b>Surgical Ward</b>	2	25-30years	2 years
<b>CWC Ward</b>	2	25-30 years	2 years
<b>Maternal Ward</b>	2	30-35 years	4 years
<b>Medical Ward</b>	2	30-35 years	7 years
<b>ICU/HDU</b>	2	35-40 years	6 years/5years

Table 1 shows that five departments were used in the data collection. All the respondents have at least two-year working experience. The respondents are aged between 25 and 40 years.

### 4.3 Forms of bedside rationing at St. Francis Community Hospital

The thematic analysis of the data showed that the dominant forms of bedside rationing at St. Francis Community Hospital were denial, deterrence, delay, dilution, and termination. These are presented below.

#### 4.3.1 Delay

Some of the respondents revealed instances where they discouraged the patients to access services through long-waiting time and authorization procedures

*“In some cases we delay surgical procedures when a patient has not paid the minimum deposit, or insurance company has not approved the procedure. In some cases, we have to confirm all payment details and receive authorization procedures from government based medical scheme, national hospital insurance fund”*Surgical ward nurse

Another respondent further added:

*“We delay services when the government hospitals are on strike since we experience increased numbers of patients seeking services in the facility”*Maternal Unit Nurse

#### **4.3.2 Deterrence**

The analysis showed nurses rationing by discouraging the patients to access services due to high cost of medical procedures or care, screening, and referral policies.

*“We refer patients to other institutions when the public hospitals healthcare workers have gone on strike because our facilities usually operate at full capacity and complements the public facilities”*Surgical Ward Nurse

Another respondent revealed deliberate use of prolonged payment process to discourage the intention of seeking care.

*“In some cases, we have to confirm all payment details and receive authorization procedures from government based medical scheme, national hospital insurance fund”* Medical Unit nurse

#### **4.3.3 Deflection**

The analysis further showed the respondents directed patients to other health facilities that could offer similar resources to save resources for the hospital.

Surgical unit respondent revealed:

*“In some instances, there are some expectant mothers who will visit the facility at early stages of labor pain we usually advise them on the most appropriate time to seek medical attention. There are also instances in which some may not afford to raise the required fees. We usually refer them to facilities in which they can afford medical costs”* Maternity Ward Nurse

Another respondent further admitted:

*“We refer patients to other institutions surrounding our hospital based on bed capacity, ability to pay and need for isolation”* outpatient Nurse

#### **4.3.4 Termination**

The respondents reported the nurses could withdraw the beneficial medical services or treatment to a patient.

*“During periods of high demand and when public facilities are not in operation, due to increased patient numbers that the facility is not in a position to handle, we terminate some admission cases and recommend outpatient medical attention... This gives our facility an opportunity to admit patients who are seriously in need of inpatient care.”* Outpatient Nurse

The respondents from the surgical ward confirmed termination claims.

*“Before we acquired this new wing, there was a doctor’s strike in the public healthcare facilities, which lasted for a long period. Our facility was overwhelmed with many patients and we had to terminate care of some inpatients that were in opposition to receive care from home so as to give room for admission of other patients who were in dire need of inpatient services. This allowed us to attend to more patients. In that time our surgical wards were fully occupied, and we relied more on other departments. Our maternity ward too was overwhelmed”* Surgical Ward Nurse

In conclusion, objective one aimed to establish the forms of bedside rationing used at St. Francis Community Hospital. The forms of bedside rationing include denial, deterrence, delay, dilution, and termination.

#### **4.4 Bedside Rationing Criteria Used**

The respondents revealed three prominent criterion are used at the St. Francis Community Hospital included medical, patient, and hospital related considerations. These are presented below

##### **4.4.1 Medical-Related Considerations**

Bedside rationing decisions were made based on considerations such as type of medical needs, severity of disease and the extent of medical need. For example, respondents indicated that medical care providers considered physical needs in terms of pain, suffering, age, and risk of life and urgency. According to respondents, expectant mothers were prioritized all the time, and in some cases, they were scheduled for emergency surgical procedures.

*“In case of delivery and there are several patients in the queue I always attend to the mother in labor. Though I first explain to other patients the risk in which expectant is in. As well as justify the need for urgent medical attention and care”* Outpatient Nurse

A sense of urgency dictates considerations in the surgical unit:

*“Some patients waited for long before admission especially in surgical wards if their procedures had to be performed by a preferred surgeon who may be having a long list. Additionally, those procedures, which required longer time, were delayed in preferences for shorter ones”* Surgical ward nurse

The assertion was also confirmed in the surgical theatre where a nurse reported that;

*“Expectant mothers who are in labor pains and needs surgical procedures are always prioritized in comparison to those waiting for orthopedic procedures. Moreover, some expectant mothers are at more risk depending on past pregnancy-related complications they are always prioritized in surgical. In cases when a patient is booked in the facility, and she is bleeding then surgical procedures are carried out first. In other cases, age is considered, and young children who are scheduled for surgical procedures are attended to first as compared to adults” Theatre Nurse*

Similar sentiments were echoed in child welfare care (CWC) where a nurse reported that they attend to babies who are at greater risk first. Both age and risk facing are considered whenever a patient is attended to in medical ward. Patient condition and diagnosis further guided the bedside rationing. According to respondent from the operating theatre;

*“We consider the condition and the level of patient risk exposure. ICU admitted most patients who referred from other facilities, wards and those who had undergone surgical procedures and needed ICU or HDU prior to stabilization” Operating Theatre nurse*

Respondents from ICU and HDU reported that they only admitted severe and intensive care cases. Otherwise, they referred patients to other wards. In the surgical ward, a nurse argued that since the unit operated from referral all cases were treated as immediate and severity would be given more importance. A respondent from the CWC reported;

*“Risk of the baby is weighted by the pediatric on board. Not all cases are handled in the maternity wing, and some are referred to higher facilities a nurse reported. In some cases, medical ward makes medical request if it*

*calls for specialized treatments, which the facility cannot manage to provide”*  
CWC Nurse

The respondents further prioritize on intravenous treatment and invasive investigations based on the condition of the patients. The nurses prioritize on the most severe cases in the orthopedic department. In ICU and HDU patients conditions dictated treatment, investigation, and those who were not responding positively called for thorough examination. Other conditions were evaluated depending on historical information derived from the patient.

#### **4.4.2 Patient-Related Consideration**

Bedside rationing was also influenced by patient factors. For instance, patients that vocalized their need or care louder than others, and put pressure to healthcare workers were attended to first. Respondent in the maternal unit said:

*“Those patients who made a lot of noise and instilled fear of litigation were mostly attended to as compared to those who waited for their turns”* Maternal Unit Nurse

#### **4.4.3 Hospital-Related Considerations**

Hospital level factors also influenced bedside rationing. Faith beliefs determine considerations for admission.

*“Since the facility is faith-based, they discourage patients from procuring abortions, if they could not fail to handle abortion-related complications”*  
Maternal Unit nurse

Another hospital level factor was resource scarcity. Specifically, scarcity of hospital staff and other hospital infrastructure influenced bedside rationing decisions. For example, Admission in intensive care unit is dependent on the availability of medical specialist to attend to the patient. In labor ward, bed capacity played a pivotal role. Number of beds determined the decisions made by the nursing officer in-charge one of the nurses revealed:

*“There was a need to determine the number of beds available in ICU, HDU and surgical wards prior to any surgical procedure. This was because different patients required ICU, HDU and surgical wards at the varying period. Hence, availability of a bed in them led to cancellation or rescheduling of surgical procedures”* ICU, HDU, & Surgical Nurse

Hospital policies further determined the kind of bedside rationing to be undertaken at St. Francis Community Hospital. The respondent from the surgical unit reported:

*“Nurses reported the policy of the hospital to undertake surgical procedures for urgent cases in surgical wards. In the newborn unit, the facility policy is to admit all babies in needs of medical attention, and they were delivered to the facility”* Surgical unit nurse

The hospital had set minimum payment deposits that were required before a patient was admitted. Patients could only be admitted if they could afford this minimum deposit. A respondent justified the need for deposit.

*“Due to risk involved, bed capacity, specialized doctor, we ask for deposit before admission.”* Medical unit nurse

In conclusion, the objective aimed to establish the criteria used for making bedside rationing decisions. The results show that respondents used medical, patients, and hospital-related considerations to make bedside rationing decisions.

#### 4.5 Factors that Influence Bedside Rationing

A key factor that influenced bedside rationing decisions was resource scarcity. For example, shortage of healthcare staff further influenced rationing at St. Francis Hospital. One of the respondents said;

*“There are some medical specialists whom we do not have in our facility. We do not have dialysis services, though some of our nurses are undertaking training and we hope to roll out the services soon”* Medical Unit nurse

The assertion was confirmed by Respondent from the ICU Unit responded;

*“If there are no nursing staffs or anesthetists on duty dependent on procedure blocked time then we reschedule”* ICU unit nurse

The respondents revealed the NBU of St. Francis Community Hospital faced staffing challenges and lack of requisite equipment, which limited the number of babies who constrains the number of babies to be admitted. In addition, it was not possible to have personalized attention to some nursing mothers and owing to the sensitivity of the section. Some of the nursing mothers would take care of manageable needs in the unit. A respondent from the surgical ward reiterated:

*“We have a limited number of surgical wards and monitors, and it need to be increased. Both maternal and medical wards called for the provision of quality medical equipment and specialists to complement and upgrade current services provided”* Surgical ward nurse

Policy of resource optimization in health facility utilities emerged as a key factor influencing rationing. The findings revealed the intention is to ensure that those performing them will be in a position to optimize the use of resources especially locum based employees and any available empty beds.

*“In cases when patients are admitted in executive wards owing to constrained capacity in other wards then they will not receive executive wards services, but they will be served as if they are in the normal wards”*

Medical ward nurse

Skills empowerment in both management and operation influenced bedside rationing. The respondents revealed the essence of good planning prior to all surgeries. The skills of the management and operations wing determined the extent the facility could offer specialized care to the patients who needed it.

In conclusion, the objective was to establish the factors influencing bedside rationing decisions at St. Francis Community Hospital. The results establish that resource scarcity, skills empowerment in management and operations, staffing challenges, as well as resource optimization policy influences bedside rationing decisions at St. Francis Community Hospital.

#### **4.6 Effects of Bedside Rationing on Care Received by Patients**

The respondents revealed that the use of bedside rationing, limits the quality and cost of care received by the patients. Respondent four, a maternal nurse reported:

*“The process leads to increased cost and limited provision of service as the patient may be referred elsewhere and they had made some cost to get o this facility.”* Maternal nurse

Longer waiting time to receive care or termination of the necessary procedures predisposes the patients to further complications.

*“I think wastage of time when the patient is being referred to other institution, where they could end up with more complications during the transfer”*

Medical Unit nurse

Another key effect of bedside rationing was mortalities in the ICU particularly due to the withdrawal of the services needed for the patients who are unable to pay even after being warged into the ICU without admission deposit as a hospital requirements. Respondent 1 from the ICU reported

*“Due to the expansion facilities recently and hospital being a private one, the hospital is operating under capacity to provide critical service to the patients, which predisposes them to loss of life if they are unable to pay for the critical care” ICU Nurse*

In conclusion, the objective sought to establish the negative implications of bedside rationing on the care received by patients. The results showed limits the quality and cost of care received by the patients, longer waiting times, and mortalities in the ICU and HDU units.

#### **4.7 Minimizing Negative Effects of Bedside Rationing**

A nurse in operating theatre recommended the hiring of specialized medical officers and nurses after being asked what needed to be done to minimize the possibility of negative effects of bed rationing. The respondent argued that the facility should espouse ethical rationing practices through adoption of continuous quality improvement policies. The respondent further added that the facility should collaborate with medical training institutions locally and internationally should as to benefit from their skills and competencies. In addition, the facility should have research and development department.

*“The hospital should improve on the number of services offered and the specialized care givers through more expansion” Maternal nurse.*

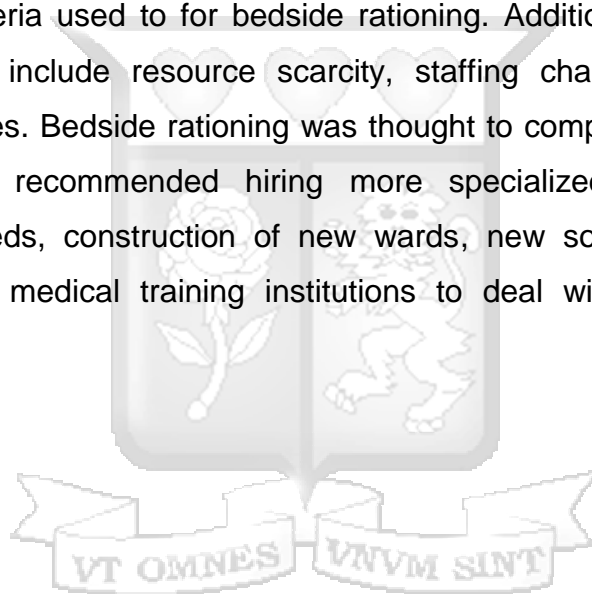
Respondent from the surgical ward further added:

*“The hospital should employ more nurses and purchase more patient monitors across all wards” Surgical Ward nurse*

In conclusion, the objective aimed to determine ways in which the hospitals can reduce the negative implications of bedside rationing. The respondents suggested an ethical rationing process, collaboration with medical institutions, research and development department, and employing specialized medical officers as well as nurses.

#### **4.8 Summary of the Findings**

The results showed the four forms of bedside rationing are practiced at St. Francis Community Hospital. The forms of bedside rationing includes deflection, deterrence, delay, and termination. Medical, patient and hospital-related considerations determine the criteria used to for bedside rationing. Additionally, factors affecting bedside rationing include resource scarcity, staffing challenges, and resource optimization policies. Bedside rationing was thought to compromise quality of care. The respondents recommended hiring more specialized doctors and nurses, providing extra beds, construction of new wards, new sources of funding, and collaboration with medical training institutions to deal with negative effects of bedside rationing.



## **5 CHAPTER 5: DISCUSSION**

### **5.1 Introduction**

In this chapter, the study presents the discussion of the findings. All sections are arranged according to the study objectives.

### **5.2 Discussion of Findings**

In the study findings, types of bed rationing practiced in St. Francis community hospital, bedside rationing criteria used and factors considered and effects of bed rationing on care provided in St. Francis community hospital were presented.

### **5.3 Forms of Bedside Rationing**

Most of the respondents agreed that they undertake bedside rationing in the form of deterrence, delay, deflection, and termination due to the insufficiency of beds available to satisfy facility demand more so during public healthcare facilities doctor's strikes. These results were consistent with Kafiriri and Martin (2007) who identified six rationing criteria deployed by health care facilities in Uganda. Although frontline health care providers mostly made this decision, it was solely dependent on health facility considerations. Similarly, in St. Francis community hospital, bed rationing was guided by hospital standard operating procedures, which had set minimum balance, raised by inpatient service seekers who were paying using cash. The patients who were covered by either government medical schemes or corporate insurance providers had to go through preauthorization process prior to admission.

These findings also mirrored Tilburt and Cassel (2013) and Stark (2011) who reported that frontline healthcare providers have a tendency to inform patients the necessity of adhering to agreed operating procedures. In some instances, these conditions may be unattractive to patients and will ultimately scare them from seeking inpatient medical services in a given facility. Bedside rationing criterion adopted in both developed and developing countries is harmonious.

### **5.4 Bedside Rationing Criteria**

Bedside rationing criterion in St. Francis community hospital was influenced by patient-related factors, human skills, and resources endowment. These findings were consistent with some empirical literature, which documented that in Ugandan health facilities patients, and system considerations influence (Kapiriri & Martin, 2007). Health facilities consideration included the availability of health care providers, drugs, and sundries. Secondly, some patients were referred to higher-level service providers since their conditions could not be handled at St. Francis Community Hospital. This was consistent with Kapiriri and Martin (2007) who reported that in Uganda severity of patient condition led to bed rationing. In other instances, patients' economic and social status led to bed rationing since those who could not manage to raise the required fees were referred to public health facilities where they could afford medical costs.

The study findings revealed that due to bedside rationing quality of service provision was affected. These results were consistent with Sulmasy (2007) who reported inverse effect between bed rationing and justice to patients while physicians are providing medical care. Caution must be exercised while rationing medical services since this will increase patient morbidity and mortality. Similarly (Lauridsen, 2009) reported that bed rationing inhibits the provision of quality healthcare and this promotes unfairness amongst seekers of health services. This may complicate achievement of millennium development goals on health care as well as healthcare agenda as stipulated by Kenyan ministry of health.

#### **5.4.1 Essential considerations**

The criteria for bedside rationing at St. Francis Community Hospital revolve around patient, hospital, and medical-related considerations.

The study identified decisions and criteria or considerations related to the hospital. The hospital-related considerations include limiting the provision of the required service due to resource unavailability. Low funding limits the ability of St. Francis Community Hospital to hire sufficient healthcare workers and equipping the wards with sufficient beds. The non-availability of resources compels the nurses to choose deterrence so that they can seek specialized services in other capable healthcare

institutions. Lauridsen, Norup, and Rossel (2008) made similar highlights in their study. Although the study was based on a more developed Danish healthcare system, it affirmed that hospitals have to consider their capacity to accommodate patients or treat patients with the available resources. The findings further align with the theory of Utilitarianism, which requires maximization of best actions to deliver expected care outcomes to the patients.

Medical-related considerations emerged from the results and they included severity of patient medical needs, and patients' ability to benefit from the services offered St. Francis Community Hospital. The considerations ensure mothers in labor and children in critical care are prioritized in the services. The findings mirror the conclusion by Young, Brown, Truog, and Halpern (2012) when they investigated the considerations made in the ICU to accommodate different patients with diverse medical conditions. The health efficiency, severity, beneficence, and method to be used are critical determinants of rationing decisions.

Patient-related considerations align with the medical needs because results from the CWC unit reveal significant prioritization of children over adults. The children run higher risks of suffering from mal-uniting than the adults with similar injuries or conditions. The priority of the nurses is the vulnerable patients who require urgent attention to reduce morbidity and mortalities. Owen-Smith, Donovan, and Coast (2015) agree that patient conditions are important during rationing. The strategy was chosen to align with the morbidity of the patients but there should be consultation between the patients and the doctors. Owen-Smith, Donovan, and Coast (2015) further observed with obesity surgery patient that the severity of the condition determines the decision taken including delay, deflection, or termination.

## 5.5 Bedside Rationing Decisions

The considerations inform the decisions on which patients to be seen first. The study determined the mismatch between the numbers of specialists and special cases of patients. Patients' needs are deflected to the non-specialists for mild cases while severely ill patients are given the first priority. Other patients should be attended after the providing immediate care to the severely ill. The process increases longer-waiting time in the outpatient department. According to Wyller (2017), physicians have a fiduciary responsibility of maintaining a physician-patient relationship that should involve the provision of the right treatment or medical attention. However, the availability of resources and medical are contributing factors to the relationship as per the view of Young, Brown, Truog, and Halpern (2012).

The decisions on which patients to consider for admission were also identified in the results. St. Francis Hospital has experienced a progressive shortage of financing, which has resulted in a perpetual shortage of healthcare staff and beds. Furthermore, the hospital is located in a low-income neighborhood, which translates to the kind of patient they attend to who are not able to meet the cost of care and drugs prescribed in the hospital. The financial incapability compels frontline workers to substitute care or recommend referral to other cheaper hospitals. However, patients receive a half dose in case the assessment determines their inability to afford even the cheaper alternatives.

The findings further reveal decisions are made based on which patient should go to surgery first among other critical care actions. Frontline workers give priority to the surgical emergencies, mothers in labor, and children scheduled for surgery. The hospital surgeon and anesthesiologists develop the theatre list for patients needing an operation. The findings reflect the view of Oei (2016) who insists decisions should be made with the severity of patients in mind but when there is a fair resource allocation to realize quality healthcare outcomes for all patients. Furthermore, the decisions should be made in a transparent, open, and informed manner. The considerations and decision-making align with the systematic ethical decision-making models; Kafiriri and Martin viewed as the means to achieving best outcomes for patients.

## **5.6 Concluding Statements**

Bedside rationing by the frontline workers is more predominant at St. Francis Community Hospital when the public hospitals are on strike as they experience increased numbers of patients who seek healthcare in the facility, where they target the same patient interms of social economic capability than during the normal periods when the public facilities are fully operational. Four forms of bedside rationing are practiced at St. Francis Community Hospital. The forms of bedside rationing include deflection, deterrence, delay, dilution, and termination. Medical, patient and hospital-related considerations determine the criteria used to for bedside rationing. Additionally, factors affecting bedside rationing availability of staffs, resource optimization policy, conditions of the patients, and urgency of the medical need. Conversely, poor patient outcomes, few cases of mortalities, and inadequate care were noted as prominent effects of bedside rationing. The study recommends prioritization on resource allocation, and policy changes to promote open and transparent decision making.

## **5.7 Recommendations**

St Francis community hospital should collaborate with relevant government authorities such as National Hospital Insurance Funds (NHIF) and promote membership recruitment drive. This would minimize chances of bed rationing which are related to patient's economic and social status. The severity of the consequences of the bedside rationing decisions necessitates government consideration of the faith-based hospital giving services that first-tier public hospitals can provide. Hence, the government should consider the hospital when allocating resources including healthcare staff and funds to facilitate the provision of complimentary services when public facilities are on strike.

The facility to seek partnership with a financier to enhance quality and make St. Francis a one-stop medical hub on all medical conditions. The management should develop a culture of meeting regularly frontline health care providers so that they

can understand medical services, which are in high demand this would ensure customized growth and development. Through these approach cases of bedside rationing would be minimized.

The healthcare workers should be trained to adopt ethical rationing decisions to maintain quality of the care services delivered to the patient. However, St. Francis Community has the responsibility of increasing resources for specialized care and normal staff to prevent burnout. Consequently, a training program on proper rationing should prevent morbidities and mortalities. An ethical rationing training process should help the nurses to weigh between competing claims of patients, medical, and hospital considerations.

The hospital should develop new resource optimization guidelines in collaboration with local practitioners and frontline workers to ensure relevance. The rationing criteria should be developed in consultation with the frontline workers, as they are charged with implementing the decisions. Furthermore, the hospital can seek legitimacy of the rationing process by availing the guidelines for public scrutiny. Resultantly, the process will eliminate distress among frontline healthcare workers while ensuring fairness as well as uniformity in the bedside rationing decisions.

#### **5.8 Limitations of the Study**

The study does not describe decision-making at the national level, which would have provided important contextual information for comparative analysis. The findings cannot be generalized to the entire healthcare system in Kenya because it was based on the opinion of the nurses as opposed to different frontline workers who complete a healthcare system. Furthermore, the setting of a faith-based community hospital implies the findings can only be applied to similar healthcare institutions. Additionally, time limitation was six months (see Appendix 3), which could not allow in-depth research with more respondents.

## 5.9 Suggestions for Further Studies

Further studies in the future should focus bedside rationing from the perspective of all frontline healthcare workers in public hospitals and more Faith based hospitals in this region. This study used the insights from nurses from a private hospital, which are not representative of all frontline workers. A quantitative approach such as factors analysis can be used to determine bedside rationing in public hospitals and other Faith Based hospitals in this region.



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## Appendices

### Appendix 1: Consent Form

#### **PARTICIPANT INFORMATION AND CONSENT FORM**

##### **SECTION 1: INFORMATION SHEET**

**Researcher:** Grace Wanjiru (Student's NO.:093607)

**Research Topic:**

Bedside Rationing By Frontline Healthcare Workers: A Case Study Of St. Francis Community Hospital

**Institutional Affiliation:** Strathmore Business School (SBS)

##### **SECTION 2: INFORMATION SHEET–THE STUDY**

**1. Why is this study being carried out?**

The overall objective of the study is to examine bedside rationing by frontline healthcare workers in St. Francis Community Hospital.

**2. Do I have to take part?**

No. Taking part in this study is optional and the decision rests only with you. Participation in this study is entirely voluntary

**3. Who is eligible to take part in this study?**

All nurses, doctors, consultants, and clinical officers in the hospital

**4. What will taking part in this study involve for me?**

The researcher will approach you and request you to take part in the study. If you are satisfied that you fully understand the goals behind this study, you will be asked to sign the informed consent form (this form) and then participate in a short interview session

**5. Are there any risks or dangers in taking part in this study?**

There are no risks in taking part in this study. All the information you provide will be treated as confidential and will not be used in any way without your express

permission.

**6. Who will have access to my information during this research?**

All your information will be kept confidential but will be transcribed for analysis only

**7. Whom can I contact in case I have further questions?**

You can contact me Grace Wanjiru on (mobile no., email, institution) or my supervisor (Name, mobile no., email, and institution )

**SECTION 3: DECLARATIONS**

I, \_\_\_\_\_, have had the study explained to me. I have understood all that I have read and have had explained to me and had my questions answered satisfactorily. I understand that I can change my mind at any stage.

Please tick the boxes that apply to you;

**Participation in the Research Study**

- I AGREE to take part in this research
- I DO NOT AGREE to take part in this research

**Storage of Information on the Completed Questionnaire**

- I AGREE to have my completed interview session stored for future data analysis.
- I DO NOT AGREE to have my interview session stored for future data analysis

**Participant's**

**Signature:**

\_\_\_\_\_

**Date...**

I, \_\_\_\_\_ certify that I have followed the SOP for this study and have explained the study information to the study participant named above, and that he/she has understood the nature and the purpose of the study and consents to

the participation in the study. He/she has been given opportunity to ask questions which have been answered satisfactorily.

**Investigator's Signature:**

\_\_\_\_\_

**Date**.....

## Appendix 2: Interview Questions

### Interview Questions

The questions are intended to gain insights on bedside rationing at St. Francis Community Hospital

#### **SECTION 1: RESPONDENT INFORMATION**

What is your title?

How old are you?

How long have you worked for this hospital?

How long have you worked in the current unit?

#### **SECTION 2: FORMS OF BEDSIDE RATIONING**

1. What kind of bedside rationing decisions do you make?
2. How do you make these decisions?
3. What guides you in making these decisions?
4. What do you consider when these bedside rationing decisions?

#### **SECTION 3: CRITERIA/ CONSIDERATIONS FOR RATIONING CARE**

5. Which of the following criteria or considerations do you make when rationing care?
  - a. *Patient-related considerations*

- i. Which patients do you see first? Why?
- ii. What kind of treatment do you give to the patients? Why?
- iii. Which patients do you take to the operating rooms first? Why?
- iv. What basis do you use to admit patients in the hospital? Why?
- v. Why do you prioritize on patient-related considerations?

*b. Hospital-related considerations*

- i. How does underfunding in the hospital determine your bedside rationing considerations?
- ii. What shortages in the hospital define your rationing criteria?
- iii. Why do you prioritize on hospital related considerations?

*c. Medical-related considerations*

- i. Does severity of patient's condition and patients' ability to benefit determine your medical-related rationing criteria?
- ii. How do you prioritize on intravenous treatment and invasive investigations?
- iii. Give reasons on why you prioritize on medical-related considerations for rationing

**SECTION 4: EFFECT OF RATIONING ON PATIENT CARE**

6. How do you think bedside rationing affects patient care in this hospital? Can you give examples?

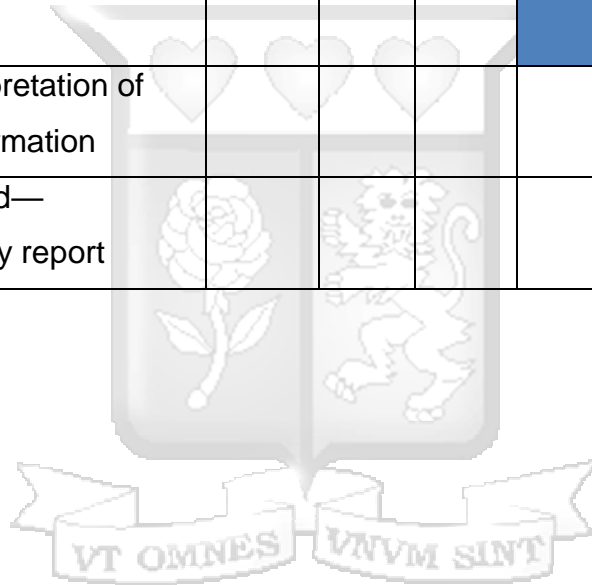
**SECTION 5: RECOMMENDATIONS**

7. What do you think the hospital can do to minimize the negative effects of bedside rationing?



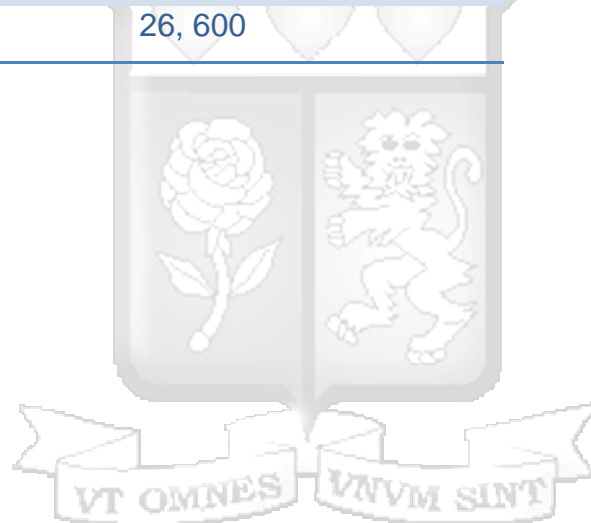
### Appendix 3: Timeline of Activities

Activity	Sept 2017	Oct 201 7	No 2017	Dec 2017	Jan 2018	Feb 2018	March 2018
Area of interest identified	x						
Topic refined to develop study proposal	x						
Write, submit and defend Proposal		x	x				
Collection of data and information				x	x		
Analysis and interpretation of collected data/information						x	
Final draft prepared— submission of study report							X



#### Appendix 4: Budget

Activities	Amount (KSH)
Developing Research Proposal	6,000
Research Instruments - Questionnaires	4,000
Data Analysis - Research Assistant	11,000
Printing Write-Up	2,600
Travel Expenses	3,000
<b>Total Expenses</b>	<b>26, 600</b>



#### Appendix 5: Ethical Approval Letter



5<sup>th</sup> April 2018

SU-IRB 0192/18

GRACE WANJIRU  
P.O Box 108- 00618  
Nairobi.

Email: [gwanjiru51@gmail.com](mailto:gwanjiru51@gmail.com)

Dear Grace Wanjiru,

**REF Student Number: 093607 Protocol ID: SU-IRB 0192/18**  
**Title: Bedside Rationing By Frontline Healthcare Workers: A Case Study of St. Francis Community Hospital**

We acknowledge receipt of your application documents to the Strathmore University Institutional Ethics Review Committee (SU-IERC) which includes:

1. Study Proposal dated March 2018
2. Participant Information sheet and consent Form dated March 2018
3. Study Questionnaire dated March 2018
4. CV

The committee has reviewed your application, and your study "*Bedside Rationing by Frontline Healthcare Workers: A Case Study of St. Francis Community Hospital*" has been granted **approval**.

This approval is valid for one year beginning **5<sup>th</sup> April 2018** until **4<sup>th</sup> April 2019**.

In case the study extends beyond one year, you are required to seek an extension of the Ethics approval prior to its expiry. You are required to submit any proposed changes to this proposal to SU-IERC for review and approval prior to implementation of any change.

SU-IERC should be notified when your study is complete.

Thank you

Sincerely,

Amina Salim  
**Regulatory Affairs Fellow**