INFLUENCE OF TOTAL QUALITY MANAGEMENT PRINCIPLES ON QUALITY HEALTH CARE PROVISIONS IN PRIVATE FACILITIES: A CASE OF AVENUE HOSPITAL, KISUMU COUNTY, KENYA.

BY

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A Research Project Report Submitted in Partial Fulfilment for the Requirements of the Award for the Degree of Master of Arts in Project Planning and Management of the University of Nairobi.

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DECLARATION

This research project is my original work and has not been presented for any award of degree in any other university.

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This Research Project Report has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This research study is dedicated to my loving parents, Mr. Wilfred Barake and Mrs. Esther Barake. Mum and Dad I am so grateful for your encouragement and support throughout all these years of my academic life. I am humbled by your persistence and believe in me; words may not express your great love, sacrifice and patience towards me. May God richly reward you.
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ABSTRACT

This research sought to examine influence of Total Quality Management Principles on Quality Healthcare Provision in private Health Facilities by focusing on Avenue Hospital, Kisumu, Kenya. This study was guided by 4 independent variables and 4 hypotheses derived from study objectives. Empirical literature of the works of widely published scholars was reviewed in this study. The study was hinged on Andersen Healthcare model as a key theoretical mode underpinning this study. The nexus of interrelationships between study variables was demonstrated by a conceptual framework configured. The study adopted a case study design with a target population of 80 respondents who comprised of doctors, nurses, pharmacists, Laboratory technologists and counselors. Using the Krejcie and Morgan Table for determining sample size, 74 respondents were selected to constitute the sample size for this study.

A six level questionnaire with both structured and unstructured questions with a 5-point likert scale was constructed and used. Data obtained was analyzed using SPSS Version 17.0. Qualitative data was analyzed by making inferences from the expressions and opinions of the respondents around the variables and presented descriptively to make inferences. The specific effect of independent variables against the dependent variable was tested through multivariate analysis while the significance of independent variables against the dependent variable was analyzed through regression and correlation. Instrument’s validity was determined by using both content and constructs validity while reliability was determined by using the test-retest method.

It is hoped this study would generate vital information and add to the pool of knowledge to the ever-expanding discipline of Project Management. To the Hospital under study it is hoped that the findings will be adapted and Quality healthcare provision will be the defining factor of the Institution. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in customer Focus will lead to a 0.652 increase in Quality healthcare provision; a unit increase in Leadership will lead to 0.587 increase in Quality healthcare provision. The findings also indicated that there was a highly significant relationship (with t statistic p value <0.023 < 0.05) Customer Focus and Quality healthcare provision. Again, from the same findings, there existed a highly significant relationship (with t statistic p value <0.0015 < 0.05) between Leadership and Quality healthcare provision. However there seemed to exist no significant relationship between Employee involvement and Quality healthcare provision (p = 0.220 > 0.05), no significant relationship between Continuous improvement and Quality healthcare provision (p = 1.000 > 0.05). In nutshell, from these findings, the researcher accepts the 1st and 2nd hypothesis and rejects the 3rd and 4th hypothesis.
CHAPTER ONE
INTRODUCTION

1.1 Background to the study.
Quality authorities like Joseph Juran (1950’s); Edward Deming (1950’s) and Philip Crosby (1980’s) have put forth several approaches to improve company performance. These approaches are embodied in a set of quality management practices, known as Total Quality Management (TQM) (Wiklund, 2003). Numerous definitions have been given on Total Quality Management (TQM) by quality gurus, practitioners and academicians. Total Quality Management (TQM) is a strategic option and an integrated management philosophy for organizations, which allows them to reach their objectives effectively and efficiently, and to achieve sustainable competitive advantage (Goldberg and Cole, 2002). TQM is generally described as a collective, interlinked system of quality management practices that is associated with organizational performance (Cua et al. (2001). Deming, (1986) defined Total Quality management as a method for ensuring that all the activities necessary to design, develop and implement a product or service are effective and efficient with respect to the system and its performance. Besterfield (1995) defined TQM as both a philosophy and a set of guiding principles that integrates fundamental management techniques, existing improvement efforts and technical tools under a disciplined approach. Wolkins (1996) outlined TQM as a tool to integrate fundamental management techniques, existing improvement efforts and technical tools under a disciplined approach focused on continuous improvement.

TQM principles have been investigated extensively. At present, there is no universally accepted definition of TQM principles (Sashkin & Kiser, 1992). According to Dale (1999), TQM consists of eight key concepts or values. These are as follows: committed leadership, adoption and communication of TQM, closer customer relationships, benchmarking, increased training, open organization, employee empowerment, zero defects mentality, flexible manufacturing, process improvement, and measurement to determine critical factors of total quality management. A study by Youssef and Zairii in 1995 was conducted to “benchmark the principles for TQM” and the results demonstrated that top management commitment, customer satisfaction, employee involvement, a change in organizational culture and continuous improvement were critical aspects and principles of TQM.

However there exists a certain consensus among researchers with regard to core TQM concepts (Waldman, 1993). Those cited are: A strong customer focus integrated in a business strategy, producing quality work for the first time and a strong quality focus within all processes,
employee involvement to support the quality initiative, the role of the leadership and senior management in guiding the company towards quality goals, continuous improvement and satisfying the supplier.

The introduction of TQM into health care systems has been supported by the World Health Organization (WHO); it has been transferred from developed to developing countries (Hamidi and Zamanparvar, 2008). Health care services have been affected by globalization. Developing countries have started adopting accreditation standards in health care in order to work towards standardizing health services on a global level and to strive to provide their citizens with high quality health care services (Segouin, 2005) As a result, in the last 30 years, many healthcare organizations increasingly adopted the TQM principles to improve the quality of outcomes and efficiency of healthcare services delivery. An effective TQM implementation enables healthcare organizations to identify clients’ requirements to deliver appropriate care, benchmark for best practices and improve processes to reduce the frequency and severity of medical errors. These activities lead to high quality healthcare services, patient satisfaction, and increased productivity and profitability (Mehrabi 2008).

In the USA health care organizations have long applied TQM in order to compete more effectively as independent organizations in a private sector. (Radnay, 1997). Similarly, in their study of U.S. hospitals, Westphal, Gulati, and Shortell (1997) suggested that early adopters of TQM practices were motivated by efficiency concerns.

The Saudi Arabian government has given TQM top priority in all its services, particularly in health care, because of increasing high costs, the new rising need for health care and for competitive global health services, increasing health awareness among the population, and the demand for a high quality of healthcare. The importance of TQM implementation in Saudi Arabia has become clear as a result of many challenges such as the country joining the World Trade Organization (Gustafsson, 2001) Recently, developing countries are increasingly showing interest in implementing TQM principles in health care, with emphasis on outcome as a measure of quality (Aldana, Piechulek, and Al-Sabir 2001). Some African countries are responding at the policy development level; others have progressed towards TQM implementation in health. Zambia started a national quality assurance programme in 1994 ahead of other African countries. The South African National Policy on Quality in Health Care provides means of improving the quality of care in public and private sectors, sets objectives of government to assure
quality and continuously improve health care by measuring the gap between standards and actual practice (Mseleku, 2007).

Ghana has gone beyond policy to implementation of TQM in health because improving the quality of health care is key objective of the Ministry of Health. Offei, Bannerman, & Kyeremeh (2004) assert that the main strategy for achieving quality of care was through implementation of quality assurance programmes, expected to become integral to routine health service delivery in Ghana. In Nigeria, narrowly defined unstructured professional audits are common. A strategic policy direction in the Health Sector Reform is improving access to quality health services by establishing system for quality assurance (Federal Ministry of Health, 2004).

The Kenyan Health System has been facing many challenges that include health systems failure, dissatisfied customers/clients and health providers resulting to high attrition rates. In 2001, the Ministry of health in Kenya then through the Department of Standards & Regulatory Services (DSRS) spearheaded the development of the Kenya Quality Model (KQM) which is based on Total Quality Management Principles to provide a conceptual framework for quality improvement in health services and systems. The KQM was reviewed in the 2008-2009 financial year, and renamed the Kenya Quality Model for Health (KQMH) and expanded to cater for clinical care, management support and leadership. (Kenya Health Management, 2008)

For the purposes of this study the researcher focused on four principles which are; 

**Customer focus, Leadership, Employee involvement and Continuous improvement** because she strongly believes they are able to influence quality healthcare provision.

1.1.1 Customer focus

Customer focus is the anchor point concept of TQM (Deming, 1986). It is a continuous process which places the customers at the center of the business operations and listens to their needs with a major focus of creating an atmosphere of cooperation throughout the organization. In this cooperative environment, employees are encouraged to stay focused on the needs of the customers. The focus on the customers will improve the organization’s image in a way that would enhance its profits and success. (Whiteley and Hessan, 1997) Attuned to the wants and needs of customers and armed with customer-driven data, TQM organizations attempt to conform to customer requirements (Crosby, 1979). Organizations must strive to create products and services that not only satisfies customers but delight them (Hines, 1996). Gitomer (1998) goes a step further by emphasizing that improving customer satisfaction leads to
customer loyalty. Customer feedback is critical in guiding organizations on the right path in developing products and improving services. An effective way of gathering customer feedback is by survey. In modern times, customers are increasingly interested in voicing their concerns and opinions. Companies capture feedback from customer surveys to identify performance aspects impacting the level of customer satisfaction so appropriate improvement action can be taken. (Read 2010)

1.1.2 Leadership
Gordon and Hogan (1994) defined leadership as the ability to persuade other people to set aside their individual concerns and pursue a common and collectively desirable goal. In order for TQM to work it is empirical that the top management assume a leadership role and commit strongly and actively to the implementation of TQM (Hansson, 2003; Solanti, 2005; Yang and Christian, 2003; Alavi and Yasin, 2007; Bergman and Klefsjö, 2003). Effective leadership empowers the employees and they give these employees a sense of pride and sense of the belonging so that employees can take ownership of the organization (Bergman and Klefsjö, 2003). It is also of outmost importance that top management provides an environment and resources that supports and facilitates the growth of everyone in the organization regardless of the level that they are in and the organization as a whole and ultimately to achieve customer satisfaction (Brashier, 2005).

1.1.3 Employee involvement
Another key determinant for the success of TQM is the degree to which everyone in an organization is involved in the decision-making processes. The “total” element of TQM implies that every organizational member is involved in quality improvement processes. A successful TQM requires a committed and well-trained work force that participates fully in quality improvement activities. It is widely accepted that the increase of employee participation in the overall quality strategy brings an increased flow of information and knowledge and contributes in the “distribution of intelligence” to the bottom of the organization for resolving problems (Vouzas and Psychogios, 2007).

Employee involvement is generally taken to refer to any management practice that gives employees influence over how their work is organized and carried out. According to Solanti (2003) the ‘involvement’ factor influences employee’s decision on whether or not to ‘fully engage’ in the job. The examples of employee involvement techniques are well documented in the literature and they involve the use of taskforces, self managing teams, employee surveys, and suggestion boxes (Wilkinson,
Godfrey Marchington, 1997). The positive effects of employee involvement on job satisfaction and productivity are also well documented and confirmed in literature (Solanti, 2003). These authors claim that the staff involvement is the key to motivating staff and improving performance in any business and at any level. According to Solanti (2003) involvement is one of the ten commandments of management which Kaizen has termed the ‘people enablement index’. Kaizen also points out that ‘being consulted and involved in decision making encourages employees be committed to what they are doing. This enables them to offer and share ideas to improve organization’s performance. Such participation is reinforced by reward and recognition systems which emphasize the achievement of quality objectives (Wilkinson, 1997).

1.1.4 Continuous improvement

Quality is a moving target; it is a never ending process. On ongoing bases it creates new standards for the organization. TQM organizations are aware that the best performance and best practices of today may be unaccepted and obsolete performance in the future. It is well known that products that used to be high quality in the past are now standard quality. Therefore organizations are continuously seeking ways and means to up their game all the time through the process of continuous improvement. Continuous improvement of all operations and activities is at the heart of TQM (Adinolfi, and Newman, 1995. In order for continuous improvement to be effective, it requires that employees acquire and apply new knowledge, skills and values to improve the organization’s performance. Therefore the process of continuous improvement is cyclic iterative and a never ending activity (Crosby, 1984). The best way to improve organizational output is to continually improve performance, not just holding the status quo (Vouzas and Psychogios, 2007).

1.2 Statement of the problem

Escalating health care costs, the emerging customer focus and consumerism has prompted significant changes to the health care system and to the manner in which the health care services are delivered. Additionally poor medical care, misdiagnosis, substandard surgery, improper drug therapies as well as hospital-acquired infections are resulting in longer and more frequent hospitalization (Rad, 2005)
A study by Harvard Medical School Research in 1991, suggested that as many as 80 000 people per year in the United States America alone died from medical negligence, these results illustrates that the inefficiencies of the health care system cost lives (Brashier, Sower, Motwani and Sovoie, 1996).
There are more than 5000 facilities in Kenya. The government oversees 41% of the health centres NGOs run 15% and the private sector operates 31% and the church operates the rest. The government operates most hospitals, health centres and dispensaries while the private sector operates hospitals and nursing home catering for the high income clientele. 

Looking at the Kenyan context almost daily, newspapers and television news broadcasts feature dramatic accounts of the critical poor state of health care facilities. In some hospitals the number of hospital bed has been reduced, some hospitals have unreasonably long waiting lists for surgery and other specialized medical treatment, as well as dissatisfied customers disappointed by mediocre services and health care workers that are underpaid and over worked. Coupled with this is the fact that the majority of the population is dependent on public health services while, only 10% of the population is covered by medical insurance and relies mostly on private hospitals. (Kenya Quality Health Model, 2011)

Many studies on TQM in hospitals have been done in developed countries, however very few have been done in developing countries. Therefore, there is a scarcity of research on TQM practices and its relationship with performance in the healthcare sector of Kenya. This study therefore seeks to investigate the influence of TQM principles on quality healthcare provisions in private health institutions in Kenya. Following Bennett (1991) and a WHO meeting (WHO, 1991) private health care provision to refer to all health care providers working outside the direct control of the state. It's on this basis that the researcher will critically establish the influence of TQM principles on quality healthcare provisions in private health institutions in Kenya in the context of the following variables: customer focus in provision of quality healthcare, leadership in provision of quality healthcare, employee involvement in provision of quality healthcare and continual improvement in provision of quality health care. The findings through this research may be helpful to bridge the gap in the existing literature of TQM and organizational performance in the Kenyan healthcare industry and will act as a point of reference in libraries to build on knowledge.

1.3 Purpose of the study

The purpose of this study was to investigate the influence of TQM principles on quality healthcare provisions in private health institution: A case of Avenue Hospital, Kisumu, Kenya.
1.4 Objectives of the study
The study was guided by the following objectives:

i. To determine the extent to which customer focus influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya.

ii. To establish the extent to which Leadership influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya.

iii. To determine how Employee involvement influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya.

iv. To assess how continuous improvement influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya.

1.5 Research Questions
The study sought to answer the following questions:

i. To what extent does Customer focus influence quality healthcare provision in Avenue Hospital, Kisumu, Kenya?

ii. To what extent does Leadership influence quality healthcare provision in Avenue Hospital, Kisumu, Kenya?

iii. How does Employee involvement influence quality healthcare provision in Avenue Hospital, Kisumu, Kenya?

iv. How does Continuous improvement influence quality healthcare provision in Avenue Hospital, Kisumu, Kenya?

1.6 Research Hypothesis
The study was guided by the following hypothesis to be tested at 95% significance level:

\( H_1 \): There is significant relationship between Customer focus and quality healthcare provision in Avenue Hospital, Kisumu,

\( H_2 \): There is significant relationship between Leadership and quality healthcare provision in Avenue Hospital, Kisumu, Kenya.

\( H_3 \): There is significant relationship between Employee involvement and quality healthcare provision in Avenue Hospital, Kisumu, Kenya.

\( H_4 \): There is significant relationship between continuous improvement influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya.
1.7 Significance of the Study
Much of the studies to date in healthcare environment provide evidences that TQM has a positive such as improvement in quality of services, employees’ commitment, and increased financial performance and also to gain competitive advantage in different hospitals. It is hoped that this study will add to the pool of knowledge of TQM integration in healthcare in Kenya. The information acquired may be used by donors, project implementers, policy and best practice practitioners as well as researchers as well as consultants who would wish to delve deeper into this field in having a base to start their seeking. The findings through this research will be helpful to bridge the gap in the existing literature of TQM and organizational performance in the Kenyan healthcare industry and will act as a point of reference in libraries to build on knowledge. To the private hospital under study, it is hoped that this study may give recommendations for better integration of TQM principles. The public hospitals, in Kenya can also map or adopt the recommendations given to suit their needs.

1.8 Delimitation of the study
This study was delimited to Avenue Hospital in Kisumu County, Kenya. The researcher settled only to Avenue Hospital because of scope, limited time and resources available for the research. The study is delimited to the influence of TQM principles on quality healthcare provisions in private health institution: A case of Avenue Hospital, Kisumu Kenya, with critical examination on the variables namely: customer focus influence on quality healthcare provision, Leadership influence on quality healthcare provision, Employee involvement in quality healthcare provision and Continual improvement in quality healthcare provision.

1.9 Limitations of the Study
This study faced the following limitations: the Avenue Hospital staff is always busy especially those in management since they are always attending high number of patients in hospital. This was a challenge during data collection since there was limited time to engage the staff one on one to fill the questionnaires. This was overcome through a drop and pick later method of the questionnaires to allow the staff complete the questionnaires.

1.10 Assumptions of the Study
The first assumption of this study was that the respondents will be available to answer correctly the questions that will guide this study. The second assumption was that variables other than mine will not interfere with my research.
1.1 Definitions of Significant Terms used in the Study

**TQM principles:** A philosophy that integrates fundamental management techniques, existing improvement efforts and technical tools under a disciplined approach. However for the purposes of this study the researcher focused on; customer focus; leadership; employee involvement and continuous improvement as she strongly believes they are able to influence quality healthcare provision.

**Quality healthcare provision:** In this study it is the extent to which patients (customers) are satisfied and the extent to which a health-care organization through the management, develops and implements quality strategy and goals.

**Customer Focus in Quality healthcare provision:** In this study it is the provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the resources available’

**Leadership in Quality healthcare provision:** In this study it is the crucial role of top management in Hospitals in developing and implementing their quality strategy and goals

**Employee involvement in Quality healthcare provision:** In this study it is the management commitment to ensure employees engage in quality work culture which results in creation of healthy corporate image by rendering quality services to the patients (customers)

**Continuous improvement in Quality healthcare provision:** In this study it is the pursuit of never-ending improvement in meeting external and internal customer needs

1.12 Organization of the study

The study was organised into five chapters. Chapter One introduces the study and gives the objectives of the study. Chapter Two reviews existing literature on the study topic and identifies the knowledge gap. Chapter Three gives the research methodology for the study. Chapter Four deals with data analysis, presentation, interpretation and discussion. Lastly, Chapter Five gives a summary of the findings, conclusions and recommendations.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter reviews literature related study based on the following thematic areas: Customer focus, Leadership, Employee involvement and Continuous improvement. In addition, the chapter gives the theoretical foundation of the study as well as the conceptual framework of the study.

2.2 Concept of TQM principles on quality health care provision
Although initially TQM was applied to manufacturing industries, but is now becoming an effective quality management tool applicable in service industries and has been widely adopted throughout the world (Rad 2006).
In healthcare TQM is defined as a “comprehensive strategy of organizational and attitude change for enabling personnel to learn and use quality methods, in order to reduce costs and meet the requirements of patients (Ovretveit, 2000) It is also defined as “A management approach for medical organizations to enhance the satisfaction of involved parties e.g. patients, doctors, nurses. Donabedian (2000) distinguished three components of quality healthcare provision: technical quality, interpersonal quality, and amenities. Technical quality relates to the effectiveness of care in producing achievable health gain. Interpersonal quality refers to the extent of accommodation of the patient needs and preferences. The amenities include features such as comfort of physical surroundings and attributes of the organization of service provision.

The introduction of TQM into health care systems has been supported by the World Health Organization (WHO); it has been transferred from developed to developing countries (Hamidi and Zamanparvar, 2008). Health care services have been affected by globalization. Developing countries have started adopting accreditation standards in health care in order to work towards standardizing health services on a global level and to strive to provide their citizens with high quality health care services (Segouin, 2005) As a result, in the last 30 years, many healthcare organizations increasingly adopted the TQM principles to improve the quality of outcomes and efficiency of healthcare services delivery. An effective TQM implementation enables healthcare organizations to identify clients’ requirements to deliver appropriate care, benchmark for best practices and improve processes to reduce the frequency and severity of medical errors. These activities lead to high quality healthcare services, patient satisfaction, and increased productivity and profitability (Mehrabi 2008).
2.3 Customer focus and Quality healthcare provision

Ovretveit (2009) defines quality care as the ‘provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the resources available’. According to Stewart (1998), Customer focus in health care refers to “providing patients with appropriate services in a technically competent manner, with good communication, shared decision making and cultural sensitivity”. Modern concepts of customer focused healthcare are based largely on research conducted in 1993 by the Picker Institute, in conjunction with the Harvard School of Medicine. This research identified eight dimensions of patient-centred care. These dimensions are: respect for patients’ preferences and values, emotional support, physical comfort, information, communication and education, continuity and transition, coordination of care, the involvement of family and friends (Frampton et al 2008)

The World Health Organization (WHO) uses the term ‘responsiveness’ in preference to ‘patient centred care’. Responsiveness describes how a healthcare system meets people’s expectations by regarding respect for people and their wishes, communication between health workers and patients, and waiting times. WHO states that recognizing responsiveness as an intrinsic goal of health systems reinforces the fact that health systems are there to serve people. Patient centred care is therefore regarded as an integral component of preventative care (Edgcumbe 2009)

Similarly, Robb and Seddon (2006) identified the following common concepts in definitions of patient centred care: informing and involving patients, eliciting and respecting patient preferences, engaging patients in the care process, treating patients with dignity, designing care processes to suit patient needs, ready access to health information.

An empirical study on customer focus and quality healthcare provision was conducted by Ali Mosadeghrad (2012) and focused on Iranian Hospitals. The study design was qualitative and aimed to generate qualitative data on the preferences and expectations of patients on quality healthcare provision in Iran. In-depth face to-face interviews were used. 800 patients who included marginalized groups were interviewed from eight hospitals, four of which were public and four were private. Purposive sampling was employed. Potential participants were approached individually by the researcher, informed of the study aims and methods and invited to participate in the interview after an informed consent had been obtained The Inclusion criteria were: ability to speak the local language (Persian); 15 years of age or
older; Not to be suffering from severe mental or cognitive disorders, to be well enough to participate in the interview.

Key findings were that for most Patients, quality healthcare provision refers to the tangible attributes of healthcare service which refers to the physical facilities (e.g. structure, building, equipment) and personnel (quantity) that create the capacity to provide healthcare services.

Another empirical study on Customer focus and Quality healthcare provision was conducted by Australian commission on safety and quality healthcare (2010). The Key findings were that for most Patients, quality healthcare provision refers to the intangible attributes in this case the technical expertise of the healthcare provider.

Much as these studies found out that quality healthcare entail the technical quality of staff and physical structures/ infrastructure of the health facilities, it leaves out interpersonal quality. Interpersonal relations attributes such as effective listening, trust, respect, confidentiality, courtesy, sympathy, understanding and compassion are a core component of quality healthcare. This study will seek to bridge this gap.

Benefits associated with patient-centred care include decreased mortality, decreased emergency department return visits, fewer medication errors, lower infection rates; increase both patient and doctor satisfaction; increase patient engagement and task orientation; reduce anxiety; and improve quality of life. Patient-centred care can also increase efficiency through fewer diagnostic tests and unnecessary referrals, and reduce hospital attendance rates (Fremton 2001) A patient-centred care approach has been linked to improvements in long-term outcomes in cardiac patients. Patient centred care is therefore regarded as an integral component of preventative care. Increasing patient satisfaction through patient-centred approaches also increases employee satisfaction, and this, in turn, improves employee retention rates and the ability to continue practicing patient-centred care (Stewart 2000)

2.4 Leadership and Quality health care provision

Leadership is an important aspect of society that has defined civilization values and goals through time (Young, 2004). In many instances, it serves as the focal point and guiding force of a group’s behavior by inducing compliance, discharging influence, personifying norms, and mobilizing efforts toward goal achievement (Bass, 1997). Moreover, leadership has evolved into a strategic activity that includes communicating a vision, developing organizational structures and processes, managing
change initiatives, and creating capabilities (Selznick, 1984; Hitt, 2002). Studies in many industries, including health care, suggest that leadership is a critical element in organizational performance. Collins (2001) suggests that disciplined, hard-working leaders are essential to moving organizations from ‘good’ to ‘great’.

Keroack (2007), in a study of highly ranked healthcare organizations, also identified leadership as a critical factor. Successful leaders in their study were passionate about improving quality, safety and service and had a hands-on style, making efforts to stay in tune with issues at the front line. James Reason et al (1997) point toward the role of leadership in quality healthcare provision is instilling a culture of patient safety that creates the environment for safer care. Such leaders help companies to recruit the right leadership team, develop an effective strategy and create a disciplined culture focused on creating high performance.

According to Fahad Al-Mailam (2005), quality leadership in health care organizations helps foster an environment that provides quality care which is linked with patient satisfaction. Organizations who seek to improve patient satisfaction and encourage return visits or customer loyalty should focus on improving the quality of care.

An empirical study titled “Quality by Design, undertaken by a team based at the University of Toronto published in 2008 (Baker et al 2008), was carried out to examine the link between leadership and quality healthcare provision. Five international and two Canadian regional hospitals were nominated. The nomination and selection process relied on experts chosen according to their reputations in the fields of practice and academia as being knowledgeable about leadership and quality healthcare. A detailed case study research was done on the hospitals. Interviews were conducted to all the hospital leaders. The key findings were that the hospitals had consistent leadership that: Embraced common goals and aligned activities throughout the organization; Employed quality and system improvement as a core strategy; Illustrated significant investments in developing skills and capabilities in their employees for improving care systems and Helped to align activities across the organization and help to create a ‘picture’ of the system.

Another empirical study conducted by Ross Bolin (2004 on the roles of leaders in high-performing health care systems. The key findings were Leadership can promote quality healthcare provision through; focusing and creating cultures that reinforce and sustain visions of continually improving, high-quality
care, establishing clear, challenging, measurable priorities for staff throughout the organization and ensuring that staff are respected, valued and supported.

The literature by this researcher views leadership as only limited to an attribute or behavior by an individual who brings influence. But a broader concept of leadership includes teams. If the team members are perceived to be in agreement, then individuals as a group can have a strong influence over others outside of the group, an influence which may be greater than the sum of the individual influence by the overall leader. This study will seek to bridge this gap.

A number of studies have shown that little real progress is possible in clinical process redesign without the involvement of doctors and other clinical staff (Bowns and McNulty 1999; Ferlie and Shortell 2001)

2.5 Continuous improvement and Quality healthcare provision

Batalden and Davidoff (2007) defined Continuous improvement, CI, in healthcare provision as “the combined and unceasing efforts of every healthcare professionals, patients and their families, researchers, payers, planners and educators – to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning)” Continuous Improvement is generally considered the act of “doing better” and while all improvements presuppose change, not all changes are improvements (Batalden & Davidoff, 2007). Continuous improvement in healthcare is made up of diverse models and methods, aiming to improve healthcare, making care more effective and efficient, and to increase safety for those being served, the patients (Donabedian, 2003).

Hirschhorn (2000) argues that a central problem for many healthcare systems is how to organize and manage improvements. To succeed with change and improvement, behavior, the culture of beliefs and values in the organization must change. The complexity and culture in healthcare has sometimes been mentioned as a barrier that explains why change and improvement progress are slow (Leape & Berwick, 2005). Hirschhorn (2000) then argues that to achieve change in the organization, the culture must be considered.

An empirical study on Continuous improvement and quality healthcare provision was conducted by Bryan J (2006). The study was done on a sample of 1,784 public hospitals in U.S which were selected because of being affordable and serving a large number of people. The Study Design was a cross-sectional study of 1,784 community hospitals. The data collection methods were through structured interviews and questionnaires. The Principal findings were; Continuous improvement processes
generally requires that clinical professionals and hospital staff from different specialties, functions, or units work together in order to document how the process works in its entirety and identify the key process factors that play a causal role in process performance. It also requires mobilizing large numbers of hospital staff, equipping them with technical expertise in CI methods and tools, and empowering them to diagnose and solve patient safety problems. Leadership and organization culture are important in implementing continuous improvement principle. Although teamwork among the employees and committed leadership brings about continuous improvement, this study however does not underscore the role of patients in bringing about improvement in healthcare provision. There is growing evidence that patients are resourceful in bringing about improvement in healthcare provision as they are on the receiving end. They have a large unrecognized potential to creatively contribute. This study will seek to fill this gap.

Motivation has been considered as an important part in change and improvements, and many researchers have investigated this issue and developed various theories (Wong, 2000). Hopefully, healthcare can learn to “Do the right things right.” This was emphasized already by Batalden and Davidoff (2007), when they claimed that all staff members have two jobs, doing their tasks and doing them better.

One of the early CI pioneers in healthcare, Donabedian (2003), implies that to be able to manage, improve and implement more general quality initiatives and improvements it is necessary to observe, measure, and evaluate. Without doing this, how do we know what to improve and whether we have succeeded? There is a need to find “evidence” for improvements to be able to spread and implement them as part of healthcare. In healthcare tools have been developed to measure medical results and outcomes, such as surgical mortality rates, tests of new therapies (Berwick 2003). Measurements also need to have relevance to all involved: physicians, other healthcare staff, patients and whole healthcare organizations (McIntyre, 2012).

According to Donabedian (2003), an organization that implements a CI program experiences a range of benefits: Improved patient health outcomes that involve both process outcomes (e.g., decreased morbidity and mortality), Improved efficiency of managerial and clinical processes. By improving processes and outcomes relevant to high-priority health needs, an organization reduces waste and costs associated with system failures and redundancy. Often CI processes are budget-neutral, where the costs to make the changes are offset by the cost savings incurred, avoided costs associated with process failures, errors, and poor outcomes.
2.6 Employee involvement and Quality healthcare provision

Gibbons (2006) defined employee involvement as: “A heightened emotional connection that an employee feels for his or her organization, that influences him or her to exert greater discretionary effort to his or her work.” Managers in all industries have made employee involvement a hot button issue because of growing evidence that engagement has a positive correlation with individual, group, and organizational performance in areas such as productivity, retention, turnover, customer service, and loyalty (Ketter, 2008) While some improvements in healthcare quality can be reached through investments in technology and infrastructure, the most dramatic improvements are achieved through people. Previous studies have concluded that unsatisfied health care employees negatively affect the quality of care which adversely affects patient satisfaction and loyalty to a hospital (Atkins, 1996; Fahad Al-Mailam, 2005)

Other studies have shown workplace culture, organizational communication and managerial styles, trust and respect, leadership, and company reputation all influence employee involvement Atkins (1996) showed that employee dissatisfaction negatively impacts the quality of care and ultimately has an adverse effect on patient loyalty and in turn hospital profitability.

An empirical study on Employee involvement and quality healthcare provision was conducted by Jimmy and Andy, 2009 on a selected number of hospitals in New York, US. The major objective was to determine whether there is a link between employee involvement and the quality healthcare provision. A set of 31 hospital departments were selected for inclusion in the study. The departments were carefully selected to represent a breadth of services types and performance quality levels. The data collection methods were through structured interviews and questionnaires. The Principal findings were; the respondents felt the major way of employee involvement is through delegating of tasks and authority by the hospital management; departments that have higher levels of employee involvement provide better experiences for patients and that Patients in departments with more satisfied employees are more likely to recommend the hospital to others and employees needed to be “included in daily operations and the hospital should listen to their feedback.” More generally, participants expressed the value of “more respect and visibility” for employees and their views.

Although employee involvement brings a lot of positive changes to an organization, this study does not clearly define key aspects of employee involvement as delegating of responsibility to personnel for tasks which they do not have the resources, skills may not be effective ‘employee involvement’. This study will seek to fill this gap.
Specifically, high involvement work practices may enhance the financial performance of health care organizations (Huselid, 1995 and Harmon, 2003). When management helps an employee feel engaged and offers them the support and resources necessary to provide quality patient care, employees are not only more satisfied with their employer but also remain more loyal. The reductions in recruitment costs and fewer employees missing work combined with lower patient variable costs and mistakes make improving employee satisfaction more appealing to administrators. (Brunetto and Farr-Wharton, 2006). Morrison, (2007) outlined several ways in which the lack of engagement and high turnover rates impact health care organizations. Some of these factors include turnover costs, which according to Waldman & Kelly (2004) range between 3.4% and 5.8% of their operating budget. When employees feel unsatisfied and unappreciated and leave the organization this puts higher workloads and stress levels on those who remain and ultimately further drives down satisfaction for both employees and patients (Fukuyama, 1995). When employees are more active in decision making they feel more engaged which leads to higher satisfaction and lower turnover rates (Relf, 1995).

2.7 Government Policies on health care provisions on relationship between TQM principles and quality health care provision

The Kenyan Health System has been facing many challenges that include health systems failure, dissatisfied customers/clients and health providers resulting to high attrition rates. There also exist wide disparities in the quality of services delivered not only between public and private institutions of similar categorization but also across regions and towns and in between institutions of disparate ownership and or sponsorship.

In 2001, the Ministry of health in Kenya then through the Department of Standards & Regulatory Services (DSRS) spearheaded the development of the Kenya Quality Model (KQM) to provide a conceptual framework for quality improvement in health services and systems in the Country. Despite this initiative, the preparatory process of KQM was not participatory and its Principles were not known by many and hence leading to failure in its implementation.

It therefore became necessary to review and update the KQM. The KQM was reviewed in the 2008-2009 financial year, and renamed the Kenya Quality Model for Health (KQMH) and expanded to cater for clinical care, management support and leadership.

Kenya Quality Model for Health is designed to measure and improve the overall quality health service delivery and is based on 7 principles.

The seven principles outlined in the Kenya Quality Model for Health are: Leadership, Customer orientation, Involvement of people and stakeholders Continuous Quality Improvement, Evidence based

2.8 Theoretical framework

This research shall be based on **Andersen’s Model of Health Services Utilization** (adapted from Andersen, 1995). In this model the health care system includes health policy, resources, and organization. Resources comprise the volume and distribution of both labor and capital, including education of health care personnel and available equipment. Organization refers to how a health care system manages its resources, which ultimately influences access to and structure of health services. According to this model, how a health organization distributes its resources and whether or not the organization has adequate labor volumes will determine if an individual uses health services.

In addition, the model includes recognition that consumer satisfaction in healthcare provision is determined by convenience quality availability among other factors. Furthermore, the model includes the notion that there are several health services available, and both the type of service available (hospital, dentist, or pharmacy) and the purpose of the health care service (primary or secondary care) will determine the type of service utilized. Thus, according to the model, whether or not a specific health care service is utilized and the frequency a service is utilized will have different determinants based on characteristics of the population and the health services (Andersen & Newman, 1995).

**Figure 1:** Andersen’s Model of Health Services Utilization (adapted from Andersen, 1995).
2.9 Conceptual framework

**Customer Focus**
- Understanding current and future needs.
- Willingness to listen to customers.
- Response to complaints.
- Courtesy to customers.

**Leadership**
- Creating and sustaining quality goals.
- Training staff.
- Hiring qualified staff.

**Employee involvement**
- Involving in decision making.
- Recognition and motivation.
- Employee training.
- Safe working conditions.

**Continuous improvement**
- Having innovation teams.
- Having performance appraisals.
- Having Policies on Continuous improvement.

**Moderating Variable**
- Government policies on healthcare provision.

**Organization culture**
- Assumptions.
- Values.
- Beliefs.

**Intervening Variable**

**Quality healthcare Provisions**
- Quality of Staff.
- Availability of medical facilities.
- Time taken to serve customers.
- Customer satisfaction.

**Dependent Variable**

**Independent Variables**
### 2.10 Knowledge gap summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>Author (Year)</th>
<th>Title of study</th>
<th>Findings</th>
<th>Knowledge gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer focus</td>
<td>Ali Mosadeghrad (2012). Australian commission on safety and quality healthcare (2010)</td>
<td>A conceptual framework for quality of care: A case of Iranian Hospitals. Patient-centre care: improving quality and safety by focusing care on patients and consumers.</td>
<td>The studies found out that customers (patients) define quality healthcare provisions into 2 major categories: the technical quality of staff and tangible attributes (this refers to structures and physical amenities).</td>
<td>Much as the study found out that quality healthcare entails the technical quality of staff and physical structures, it leaves out interpersonal quality which is also a core component of quality healthcare. This study will seek to bridge this gap.</td>
</tr>
<tr>
<td>Leadership</td>
<td>(Baker et al 2008). G Ross Bolin (2004)</td>
<td>Quality by Design, University of Toronto, Canada. The roles of leaders in high-performing health care systems</td>
<td>The studies found out that Hospitals which were ranked as outstanding in quality healthcare provision had leaders that were focused on quality healthcare and consistently put in systems in place to ensure this was achieved</td>
<td>The literature by this researchers views leadership as only limited to an attribute or behavior by an individual who brings influence. But a broader concept of leadership includes teams. If the team members are perceived to be in agreement, then individuals as a group can have a strong influence over others outside of the group, an influence which may be greater than the sum of the individual influence by the overall leader.</td>
</tr>
</tbody>
</table>
| Employee involvement | Jimmy and Andy, 2009  
Graham Lowe (2012) | Employee involvement in healthcare provision  
How Employee Engagement Matters for Hospital Performance | The studies found out that employee involvement by the hospital management leads to increased customers (patients) satisfaction as empowered employees are motivated and in turn offer quality services to patients. | Although employee involvement brings a lot of positive changes to an organization, these studies do not clearly define key aspects of employee involvement. Delegating of responsibility to personnel for tasks which they do not have the resources, skills may not be effective employee involvement. Managers should involve employee through delegating tasks which the employee have the required skills and giving them the necessary resources and authority then hold the personnel accountable. Hence this study will seek to bridge this gap. |
| Continuous improvement | Bryan J. et al (2006), Adrian Bishop (2004) | Continuous improvement implementation in Hospitals Health services Research Journal | The studies found out that cooperation among the employees, and a leadership that is committed to Continuous improvement and changes in the organization. | Although teamwork among the employees and committed leadership brings about continuous improvement. These studies however do not underscore the role of patients in bringing about improvement in |
| Continuous Quality Improvement at the Healthcare Provider Level | culture and structure in most healthcare institutions is key in bringing about quality healthcare provision | healthcare provision. There is growing evidence that patients are resourceful in bringing about improvement in healthcare provision as they are the consume. They have a large unrecognized potential to creatively contribute. This study will seek to fill this gap. |
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter describes the methods to be used to provide answers to the research questions. It focuses research design, sampling procedure, data collection methods, validity, reliability, data analysis, operational definition of variables and ethical issues.

3.2 Research Design
This study employed a case study design. A case study is an in-depth investigation of an individual, institution or phenomenon (Mugenda and Mugenda, 2003). The importance of a case study is emphasized by Kothari (2000) who both acknowledges that a case study is a powerful form of qualitative analysis that involves a careful and complete observation of a social unit, irrespective of what type of unit is under study. This justifies why a case study is chosen as it enables the researcher to have an in-depth understanding of the facts of the TQM practices in private hospital under study. This design is also ideal since the empirical inquiry in this research involves that in which the researcher does not have direct control over the independent variables because their manifestation already occurred or, they cannot be manipulated.

3.3 Target Population
The target population of this study was 80 respondents who are the medical staff at the Avenue Hospital, Kisumu. Kenya. The respondents in this study will be Doctors, Nurses, Pharmacists, Administrators, Laboratory technologists, Counselors and Director.

3.4 Sampling size and sampling Procedure
This section describes the sample size and sampling procedure used in the study.

3.4.1 Sample Size
A sample size is a subset of the total population that is used to give the general views of the target population (Kothari 2004). Determination of sample size will be important to the researcher since it will be useful to bringing out credible representation of the population. The sample size for this study is 74 drawn from a target population of 80 using Krejcie and Morgan (1970) sampling theory as depicted in the table below
Table 3:1 Sampling Frame

The sampling frame shall be determined using Krejcie and Morgan sampling frame as depicted in the table below:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Target Population</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Nurses</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>Administrators</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory technologists</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

3.4.2 Sampling Procedure

Sampling refers to the process of selecting a number of individuals for a study in such a way that the individuals selected represents the large group from which they are selected (Mugenda and Mugenda, 2003. The researcher administered the questionnaire to the selected Doctors, Nurses, Pharmacists, Administrators, Laboratory technologists, Counselors and Director by dropping the questionnaire physically to them at the Hospital. The researcher picked them after a week to allow the respondents to answer them in their free time.

3.5 Research Instruments

This study utilized a questionnaire as a primary tool for data collection. The questionnaire contained both structured and unstructured questions and will contain 6 sections. The questions were systematic and pre-determined and were presented with exactly the same wording and in the same order to all respondents. Section A captures questions on the demographic characteristics of respondents, Section B entails questions on Customer focus on quality healthcare provisions, Section C captures questions on Leadership in quality healthcare provision section D contains questions on Employee involvement in quality healthcare provisions, Section E contains questions on Continuous improvement in quality healthcare provision. Section F has questions on the dependent variable.
3.5.1 Pilot-testing of the Research Instrument

A pilot study on the questionnaire was carried out two weeks prior to the main study. Allan and Emma (2011) pointed out that research outcome quality is determined by instruments quality. Pilot testing entailed picking 10 respondents and administering the questionnaire to them so as to help determine its mechanics.

Pilot testing points out any problems with test instructions, instances where items are not clear and help the researcher format the questionnaire and remove any noted typographical errors and inconsistencies (Mugenda 2003). Once all issues with the test items was addressed, the questionnaire was ready for large-scale field testing. The primary purpose of pilot-testing of the research instrument is to construct an initial picture of test validity and reliability, help elicit appropriate responses to the study and determine if questions in the questionnaire are relevant and appropriate. Pilot testing also helps to check on the clarity and suitability of the wording.

3.5.2 Validity of the Research Instrument

Validity helps the researcher to be sure that questionnaire items measure the desired constructs. Donald and Delno (2006) define instrument’s validity as the appropriateness, meaningfulness and usefulness of inferences a researcher makes based on data collected. Mugenda (2003) agrees with this assertion that validity has to do with how accurately the data obtained in the study represents the variables.

There are three types of validity that are of interest to researchers: content related, criterion related and construct validity (Donald and Delno, 2006). This study employed content and construct validity. Construct validity is appropriate to the research paradigm since it seeks to unearth the finer details in project performance through phrasing and constructing clear questions that can be understood by respondents and avoiding vagueness. Content validity was utilized by ensuring that the questionnaire had the questions that will enable the research objectives and research questions to be answered. This will be achieved by giving the questionnaire to my supervisor for scrutiny.

3.5.3 Reliability of the Research Instrument

Donald and Delno (2006) define reliability of the research instrument as the consistence of scores obtained and that it has two aspects; stability and equivalence. Reliability is said to be achieved if an instrument gives consistent results with repeated measurements of the same object. Within this study the
test-retest method was used which will involve administering the same questionnaire to the same group after a certain interval has elapsed since the previous test (Coopers and Schindler, 2003). The test retest criterion was chosen since respondents in this study are health professional who have a detailed grasp on research and therefore will understand the need for filling the questionnaire for the second time. The answered questionnaire was then given to the Supervisor to ascertain if the answers given correctly tackles the variables.

3.6 Data Collection Procedures
The study used primary data. Primary data refers to that which will originally be collected for the first time for the purposes of this study. The use of primary data is supported by (Saunders et al, 2007). The type of data to be collected shall be shall be informed by the objectives of the study as supported by Teddlie (2010). After successfully defending the proposal, the researcher sought to obtain a research permit from NACOSTI. The researcher undertook data collection by using two fronts. In the first instance, the researcher physically visited the project sites and hand delivered questionnaires. This approach accorded the researcher an opportunity to meet the respondents. The researcher then collected the questionnaire for analysis after a week to allow the respondents to answer the questionnaire in their free time.

3.7 Data Analysis Techniques
Data analysis was done following the four phases normally used in research, these include: data clean up, reduction, differentiation and explanation. Data clean up involved editing, coding and tabulation in order to detect anomaly. The researcher uses descriptive statistics to analyze data by utilizing means, modes and standard deviation as per the research objectives. Correlation analysis was used to determine the strength between independent variables and dependent variables. The results of data analysis are presented in form of tables for interpretation. Also, researcher used Statistical Package for Social Sciences (SPSS) Version 17 and Ms Excel software tools to aid in carrying out descriptive analysis from the quantitative data collected using questionnaires.

3.8 Ethical Issues
In this study, ethical considerations was made on the basis of the basic concepts and aspects identified as important components of social considerations in social science research (Oliver, 2008)First and foremost, the researcher obtained a research permit from the National Commission of Science,
Technology and Innovation at the Ministry of Education, Science and Technology. Secondly, the researcher wrote a letter of transmittal of data collection instruments to inform respondents in the research process that the research shall purely be for academic purposes only. The respondents were further assured that information gathered through this research will not be shared with their colleagues. Respondents were further requested not to indicate their names anywhere on the questionnaire and shall also be implored to provide the requested information truthfully and honestly. Finally, the findings from this study shall be communicated to concerned parties including interested stakeholders upon request.

3.9 Operational Definition of Variables.
Operational definition of independent, dependent and moderating variables is as shown on table 3.1 below:
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Variable</th>
<th>Indicators</th>
<th>Measurement Scale</th>
<th>Analysis Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To determine the extent to which customer focus influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya.</td>
<td>Customer focus</td>
<td>• Understanding current and future needs.</td>
<td>Ordinal</td>
<td>Descriptive/Inferential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Willingness to listen to customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Response to complaints</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Courtesy to customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To establish the extent to which Leadership influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya</td>
<td>Leadership</td>
<td>• Creating and sustaining quality goals</td>
<td>Ordinal</td>
<td>Descriptive/Inferential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Training staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Hiring qualified staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To determine how Employee involvement influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya</td>
<td>Employee involvement</td>
<td>• Involving in decision making</td>
<td>Ordinal</td>
<td>Descriptive/Inferential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recognition and motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Employee training</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Safe working conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To assess how continuous improvement influences quality healthcare provision in Avenue Hospital, Kisumu, Kenya</td>
<td>Continuous improvement</td>
<td>• Having innovation / research teams</td>
<td>Ordinal</td>
<td>Descriptive/Inferential</td>
</tr>
</tbody>
</table>
| healthcare provision Avenue Hospital, Kisumu, Kenya | • Existence of performance appraisal  
• Provision of resources for continuous improvement | statistics |
|---|---|---|
| **Dependent Variable** | • Existence of medical facilities (medical labs, beds, machines)  
• Having competent staff  
• Having the right number of staff  
• Amount of time taken to serve customers | **Ordinal** | **Descriptive statistics** |
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction
This chapter presents analysis of data and presents data in Tables and cross tabulations, Interprets and discusses study findings according to study themes as obtained from the questionnaire. The objective of the study was to investigate the influence of Total Quality Management Principles in quality healthcare provisions in private health facilities: a case of Avenue Hospital, Kisumu County, Kenya

4.2 Questionnaire Response Rate
A total of seventy (70) questionnaires had been distributed to the respondents, out of which 42 were returned. This gave a response rate of 60%. According to Mugenda and Mugenda (2003) a response rate of 50% is adequate for a study, 60% is good and 70% and above is excellent. Thus, a response rate of 60% was fit and reliable for the study as shown in Table 4.1.

Table 4.1 Questionnaire Response Rate

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>42</td>
<td>60</td>
</tr>
<tr>
<td>Did Not Respond</td>
<td>28</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3 Demographic Characteristics of the Respondents
As part of their demographic information, the study sought to establish the background information of respondents. This included length of service in the organization and the department where they were working. These are further discussed in the following subsequent themes.
4.3.1 Distribution of Respondents by Length of Service
The study also sought to establish the number of years the respondents had worked for Avenue Hospital, Kenya therefore the respondents were asked to state their length of service. The results are presented in Table 4.3 below.

Table 4.2: Distribution of Respondents by Length of Service in the Health facility

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>12</td>
<td>28.57</td>
</tr>
<tr>
<td>3-5</td>
<td>30</td>
<td>71.43</td>
</tr>
<tr>
<td>6 and above</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As shown in Table 4.2, 12 (28.57%) of the respondents reported that they have been working for Avenue Hospital, Kenya between 0 and 2 years, and 30 (71.43%) reported that they have been working for this health facility between 3 and 5 years. This implies that most of the respondents in this study had the requisite information regarding Total Quality Management Principles in their workplace given the Hospital has been in operation for 4 years only.

4.4 Influence of Total Quality Management Principles on Quality Healthcare Provision

Table 4.3: Customer Focus and Quality Healthcare provision

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>12</td>
<td>28.57</td>
</tr>
<tr>
<td>Great extent</td>
<td>18</td>
<td>42.86</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>7</td>
<td>16.67</td>
</tr>
<tr>
<td>Very low extent</td>
<td>1</td>
<td>2.38</td>
</tr>
<tr>
<td>Low extent</td>
<td>4</td>
<td>9.52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
According to the findings, most of the respondents (42.86%) indicated that Customer focus influences quality healthcare provision to a great extent, 28.57% said to a very great extent, 16.67% said to a moderate extent, 2.38% said to a very low extent and 9.52% indicated to a low extent.

Table 4.4: Customer Focus and Quality Healthcare provision

<table>
<thead>
<tr>
<th>Responses</th>
<th>Mean</th>
<th>SD</th>
<th>CV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowing patient needs/expectations</td>
<td>4.525</td>
<td>0.974</td>
<td>21.5%</td>
</tr>
<tr>
<td>Customer requirements and expectations as the basis for</td>
<td>4.089</td>
<td>0.626</td>
<td>15.3%</td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick responses upon any inquiry</td>
<td>3.964</td>
<td>0.852</td>
<td>21.5%</td>
</tr>
<tr>
<td>Processes designed/improved based on customers’ requirements</td>
<td>3.857</td>
<td>0.699</td>
<td>18.1%</td>
</tr>
<tr>
<td>Inventing new ways of service delivery to satisfy our</td>
<td>3.825</td>
<td>0.874</td>
<td>22.8%</td>
</tr>
<tr>
<td>Customers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is an effective system for solving the Patient</td>
<td>3.654</td>
<td>0.63</td>
<td>17.2%</td>
</tr>
<tr>
<td>problems and complaints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our hospital regularly carries out external customers’</td>
<td>3.428</td>
<td>0.587</td>
<td>17.2%</td>
</tr>
<tr>
<td>satisfaction Survey</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the findings, knowing patient needs/expectations influences Quality healthcare provision to a very great extent as expressed by a mean score of 4.525. Being keen on customer requirements as the basis for quality, quick response upon any inquiry, process improvement based on customers’ requirements, inventing new ways of service delivery influences Quality healthcare provision as expressed by a mean score of 4.089, 3.964, 3.857, 3.825. Effective system for solving patient complaints and regularly carrying out external customers satisfaction survey only influences M&E integration to a moderate extent respectively as expressed by a mean score of 3.654 and 3.428 respectively.
Table 4.5: Employee involvement and Quality healthcare provision

The study sought to determine the extent that employee involvement influences Quality healthcare provision in Avenue Hospital, Kenya

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>8</td>
<td>19.05</td>
</tr>
<tr>
<td>Great extent</td>
<td>12</td>
<td>28.57</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>19</td>
<td>45.24</td>
</tr>
<tr>
<td>Very low extent</td>
<td>1</td>
<td>2.38</td>
</tr>
<tr>
<td>Low extent</td>
<td>2</td>
<td>4.76</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

According to the findings, most of the respondents (45.24%) indicated that Employee involvement influences quality healthcare provision to a moderate extent, 19.05% said to a very great extent, 28.57% said to a great extent, 2.38% said to a very low extent and 4.76% indicated to a low extent.
Table 4.6: Employee involvement and Quality Healthcare provision

<table>
<thead>
<tr>
<th>Responses</th>
<th>Mean</th>
<th>SD</th>
<th>CV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are encouraged to participate in making decisions pertaining to quality</td>
<td>4.325</td>
<td>0.955</td>
<td>14.5%</td>
</tr>
<tr>
<td>Quality-related training given to employees throughout the organization</td>
<td>3.851</td>
<td>0.700</td>
<td>12.2%</td>
</tr>
<tr>
<td>The incentive system focuses on teamwork without overlooking individual distinction in performance</td>
<td>3.720</td>
<td>0.698</td>
<td>11.1%</td>
</tr>
<tr>
<td>Our employees are recognized with non-monetary incentives for superior quality performance</td>
<td>3.600</td>
<td>0.653</td>
<td>9.0%</td>
</tr>
<tr>
<td>Our employees are recognized with monetary incentives for superior quality performance</td>
<td>3.502</td>
<td>0.611</td>
<td>8.9%</td>
</tr>
<tr>
<td>There is delegation of authority to the employees</td>
<td>3.400</td>
<td>0.450</td>
<td>6.9%</td>
</tr>
<tr>
<td>There is provision of safe working conditions to employees</td>
<td>3.338</td>
<td>0.400</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

According to the findings, Employee participation in decision making influences quality healthcare provision to a very great extent as expressed by a mean score of 4.325. Quality training to employees influences quality healthcare provision to a great extent as expressed by the mean score of 3.851. Focusing on teamwork, giving of non-monetary incentives and non-monetary incentives influences quality healthcare provision as expressed by the mean score of 3.720, 3.600, and 3.502 respectively. Delegation of authority and provision of safe working conditions influences quality healthcare provision to a moderate extent as expressed by a mean score of 3.400 and 3.338 respectively.

Table 4.7: Leadership and Quality healthcare provision

The study sought to determine the extent that Leadership influences quality healthcare provision in Avenue Hospital, Kenya
Table 4.7: Leadership and Quality healthcare provision

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>5</td>
<td>11.90</td>
</tr>
<tr>
<td>Great extent</td>
<td>20</td>
<td>47.62</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>8</td>
<td>19.05</td>
</tr>
<tr>
<td>Very low extent</td>
<td>6</td>
<td>14.29</td>
</tr>
<tr>
<td>Low extent</td>
<td>3</td>
<td>7.14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

According to the findings, most of the respondents (47.62%) indicated that Leadership influences quality healthcare provision to a great extent, 11.90% said to a very great extent, 19.05% said to a moderate extent, 14.29% said to a very low extent and 7.14% indicated to a low extent.

Table 4.8: Leadership and Quality Healthcare provision

<table>
<thead>
<tr>
<th>Responses</th>
<th>Mean</th>
<th>SD</th>
<th>CV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality is considered as a strategic priority by the leadership</td>
<td>4.65</td>
<td>0.5301</td>
<td>8.771%</td>
</tr>
<tr>
<td>Our hospital’s top management and major department heads are hired based on quality performance</td>
<td>4.25</td>
<td>0.7204</td>
<td>5.899%</td>
</tr>
<tr>
<td>The hospital leadership is interested in employing people of high competence</td>
<td>4.38</td>
<td>0.7356</td>
<td>5.95%</td>
</tr>
<tr>
<td>Major department heads and employees are involved by the Leadership in quality planning</td>
<td>3.875</td>
<td>0.8205</td>
<td>4.722%</td>
</tr>
<tr>
<td>Commitment of the hospital’s top management to employee training</td>
<td>3.612</td>
<td>0.7203</td>
<td>5.014%</td>
</tr>
<tr>
<td>There is a hospital-wide quality statement</td>
<td>3.281</td>
<td>0.7738</td>
<td>4.240%</td>
</tr>
</tbody>
</table>

According to the findings, considering of quality as a strategic priority by the leadership influences quality healthcare provision to a very great extent as expressed by a mean score of
4.65. Hiring of department heads based on quality performance, employing people of high competence and employee involvement in planning influences quality healthcare provision to a great extent as expressed by a mean score of 4.25, 4.38 and 3.875 respectively. Commitment of the management to training and having a quality statement influences quality healthcare provision to a moderate extent as expressed by a mean score of 3.612 and 3.281 respectively.

**Table 4.9: Continuous improvement and Quality healthcare provision**

The study sought to assess how Continuous improvement influence Quality healthcare provision in Avenue Hospital, Kenya

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>4</td>
<td>9.52</td>
</tr>
<tr>
<td>Great extent</td>
<td>7</td>
<td>16.67</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>24</td>
<td>57.14</td>
</tr>
<tr>
<td>Very low extent</td>
<td>4</td>
<td>9.52</td>
</tr>
<tr>
<td>Low extent</td>
<td>3</td>
<td>7.14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

According to the findings, most of the respondents (57.14%) indicated that Continuous improvement influences quality healthcare provision to a moderate extent, 16.67% said to a great extent, 9.52% said to a very great extent and low extent, 7.14% indicated to a low extent.
Table 4.10: Continuous improvement and Quality Healthcare provision

<table>
<thead>
<tr>
<th>Responses</th>
<th>Mean</th>
<th>SD</th>
<th>CV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our hospital’s top management supports a long-term quality improvement process</td>
<td>3.752</td>
<td>0.700</td>
<td>12.2%</td>
</tr>
<tr>
<td>Our hospital’s top management provides the necessary resources for continuous improvement</td>
<td>3.710</td>
<td>0.698</td>
<td>11.1%</td>
</tr>
<tr>
<td>Employees participate in continuous improvement decisions</td>
<td>3.690</td>
<td>0.653</td>
<td>9.0%</td>
</tr>
<tr>
<td>The continuous improvement of processes carried out through teamwork</td>
<td>3.572</td>
<td>0.611</td>
<td>8.9%</td>
</tr>
<tr>
<td>Employees are encouraged to experiment and try out new approaches</td>
<td>3.422</td>
<td>0.588</td>
<td>7.2%</td>
</tr>
<tr>
<td>The hospital management encourages you to participate in continuous education in your field of specialization</td>
<td>3.390</td>
<td>0.450</td>
<td>6.9%</td>
</tr>
<tr>
<td>There are continuous meetings to discuss processes that enhance the continuous improvement of quality</td>
<td>3.358</td>
<td>0.400</td>
<td>6.9%</td>
</tr>
<tr>
<td>Our hospital gives feedback to employees on their quality performance</td>
<td>2.221</td>
<td>0.338</td>
<td>6.71%</td>
</tr>
</tbody>
</table>

According to the findings, Management support of long term quality improvement process, providing of resources for Continuous improvement, Employee participation in Continuous improvement process and teamwork greatly influenced Quality healthcare provision as expressed by a mean score of 3.752, 3.710, 3.690, and 3.572 respectively. Trying out of new approaches by employees, Continuous education by employees, and Continuous meetings influenced Quality healthcare provision to moderate extent as expressed by a mean score of 3.422, 3.390, and 3.358 respectively. Feedback to employees influenced Quality healthcare provision to a low extent as the mean score was 2.221.

4.11 Factors influencing Quality Healthcare provision

In an effort to determine the influence of Total Quality Management principles in Quality healthcare Provision in Avenue Hospital, Kenya, respondents in this study were asked to indicate their level of agreement with specific statements in the questionnaire that related to Customer
focus, Leadership, Employee involvement and Continuous improvement. The findings are as shown in Table 4.11 below:

### Table 4.11 Factors influencing Quality Healthcare Provision in private facilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Customer focus in Quality healthcare provision</td>
<td>4.413</td>
<td>0.763</td>
</tr>
<tr>
<td>Influence of Leadership in Quality healthcare provision</td>
<td>4.226</td>
<td>0.852</td>
</tr>
<tr>
<td>Influence of Employee involvement in Quality healthcare provision</td>
<td>3.853</td>
<td>0.982</td>
</tr>
<tr>
<td>Influence of Continuous improvement in Quality healthcare provision</td>
<td>3.656</td>
<td>0.909</td>
</tr>
</tbody>
</table>

On a scale of 1 – 5, with 1 representing low influence and 5 representing Very great influence, the respondents indicated that Customer focus in Quality healthcare provision had a mean of 4.413 and a standard deviation of 0.763, Leadership in Quality healthcare provision had a mean of 4.226 and a standard deviation of 0.852 in Avenue Hospital, Kenya. Further, the respondents indicated that Employee involvement with a mean of 3.853 and a standard deviation of 0.982 also influenced Quality healthcare provision to a moderate extent. The respondents further indicated that Continuous improvement in Quality healthcare provision had the lowest influence in Quality healthcare provision with a mean of 3.656 and a standard deviation of 0.909.

### 4.5. Inferential Statistical Analysis

#### 4.5.1 Inferential Statistical Analysis

The researcher conducted a multiple regression analysis so as to test relationship among the study variables (independent and dependent). SPSS version 17 was used for this analysis. Since the study has hypotheses, the test of hypotheses to determine their level of significance was tested through multiple regression and correlation. The significance level was set at probability p<0.05 for every statistical set. The influence of moderating variable on the relationship between the independent and dependent variables was derived by using Stepwise Regression R²
4.6 Stepwise Regression
This regression model involves mathematical modeling, as postulated by Larry (2013) that such models are used where variables are deliberately chosen without necessarily being backed by theory. Since the influence on the moderating variable was deliberate for this study, then the requirement for the use of Stepwise Regression $R^2$ to analyze parametric data is justified

Table 4.12 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>R</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.797</td>
<td>0.722</td>
<td>0.592</td>
<td>0.043</td>
<td></td>
</tr>
</tbody>
</table>

**Predictors:** Customer focus, Leadership, Employee involvement and Continuous improvement

**Dependent Variable:** Quality healthcare provision.

This model depicts that the regression value was 1.000 while the R Square value was found to be 0.722%, meaning 72% of data utilized in this study was valid. This indicates that the interpretation of findings from this data through inferential statistics is highly significant.

4.7 Multiple Regression Model
Multiple regression analysis was conducted as to determine the relationship between the independent variables which are Customer focus, Leadership, Employee involvement and Continuous improvement against the dependent variable which is Quality healthcare provision in Avenue Hospital, Kenya. After running the selected data through SPSS, a statistical model was generated. The model generated is what is popularly called a multiple regression model.

This was $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$

**Where:**
$Y =$ is the dependent variable (Quality Healthcare provision)
$X_1 =$ is an explanatory factor (independent variable), Customer Focus
$X_2 =$ is an explanatory factor (independent variable), Leadership
$X_3 =$ is an explanatory factor (independent variable), Employee involvement
$X_4 =$ is an explanatory factor (independent variable), Continuous improvement
$\beta_0 =$ Constant (Y intercept), $\beta =$ Coefficient and $\epsilon =$ Error term
4.8 Coefficient of Regression equation

Table 4.13 Coefficient of Regression

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1</td>
<td>1.127</td>
<td>0.2235</td>
<td>5.132</td>
</tr>
<tr>
<td>Customer Focus</td>
<td>X1</td>
<td>0.652</td>
<td>0.1032</td>
<td>0.1032</td>
</tr>
<tr>
<td>Leadership</td>
<td>X2</td>
<td>0.587</td>
<td>0.3425</td>
<td>0.1425</td>
</tr>
<tr>
<td>Employee involvement</td>
<td>X3</td>
<td>0.445</td>
<td>0.2178</td>
<td>0.1178</td>
</tr>
<tr>
<td>Continuous improvement</td>
<td>X4</td>
<td>0.339</td>
<td>0.1937</td>
<td>0.0937</td>
</tr>
</tbody>
</table>

As per the SPSS generated table above, regression equation

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon \]

becomes:

\[ Y = 1.127 + 0.652X_1 + 0.587X_2 + 0.445X_3 + 0.339X_4 + \epsilon \]

According to the regression equation established, taking all factors into account (Customer focus, Leadership, Employee involvement and Continuous improvement) constant at zero, Quality Healthcare provision in Avenue Hospital Kenya will be 1.127. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in Customer Focus will lead to a 0.652 increase in Quality healthcare provision; a unit increase in Leadership will lead to 0.587 increase in Quality healthcare provision, a unit increase in Employee involvement will lead to a 0.445 increase in Quality healthcare provision, a unit increase in Continuous improvement will lead to a 0.339 increase in Quality healthcare provision.

4.8 Correlation Analysis

Spearman correlation analysis was conducted at 95% confidence interval and 5% confidence level and was a 2-tailed test. The Table below indicates the correlation matrix between the
independent variables (Customer Focus, Leadership, Employee involvement and Continuous improvement) against the dependent variable which is Quality Healthcare provision in Avenue Hospital, Kenya

<table>
<thead>
<tr>
<th>Variable</th>
<th>Customer focus</th>
<th>Leadership</th>
<th>Employee involvement</th>
<th>Continuous improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer focus</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.(2 tailed)</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>0.777*</td>
<td>1.000</td>
<td>0.207</td>
<td>0.690</td>
</tr>
<tr>
<td>Sig.(2 tailed)</td>
<td>0.023</td>
<td>0.623</td>
<td>0.058</td>
<td></td>
</tr>
<tr>
<td>Employee involvement</td>
<td>0.478*</td>
<td></td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Sig.(2 tailed)</td>
<td>0.134</td>
<td></td>
<td>0.218</td>
<td>0.632</td>
</tr>
<tr>
<td>Continuous improvement</td>
<td>0.279*</td>
<td>0.218</td>
<td>0.632</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig.(2 tailed)</td>
<td>0.356</td>
<td>0.604</td>
<td>0.604</td>
<td>0.092</td>
</tr>
</tbody>
</table>

From the Table above, the findings show there exists a positive highly significant relationship between Customer focus at 0.822 and Quality healthcare provision. These results are in consonance with the findings from the multiple regression models. Again, from the same correlation Table, the findings show there exists a positive highly significant relationship between Leadership at 0.777 and Quality Healthcare provision. These results are also in conformity with the findings from the multiple regressions model depicted above. However, there is a weak relationship between Employee involvement at 0.478 and Quality healthcare provision and finally a very weak relationship between Continuous improvement at 0.279 and Quality healthcare provision. Thus at 5% confidence level and at a p-value (P<0.05), basing on the results from the correlation analysis, only Customer Focus and Leadership are the only variables that influence Quality healthcare provision at Avenue Hospital, Kenya. Variables related to Employee involvement and Continuous improvement not of any significance to Quality healthcare provision. In nutshell, from these findings we therefore accept the 1st and 2nd hypothesis and reject the 3rd and 4th hypothesis.
4.9. Discussion of findings

The study findings have been discussed as per the research objectives themes as follows:

4.9.1 Customer Focus and Quality Healthcare provision in private facilities

The study found out that Customer Focus highly influences Quality healthcare provision in Avenue Hospital, Kenya. Customer Focus indicators such as knowing patient needs/expectations and employing Customer requirements and expectations as the basis for Quality and making of quick responses upon any inquiry had the highest mean scores. The findings are in line with a study by Whiteley and Hessan (1997) which explains that placing the customers at the center of the business operations and listening to their needs will improve the health facilities’ image in a way that would enhance its profits and success as it leads to provision of Quality services. Benefits associated with Customer focus in health care include decreased mortality, decreased emergency cases and return visits, fewer medication errors, lower infection rates; increase both patient and doctor satisfaction; increase patient engagement and task orientation; reduce anxiety; and improve quality of life. Customer focus in health care can also increase efficiency through fewer diagnostic tests and unnecessary referrals, and reduce hospital attendance rates (Fremton2001) Increasing patient satisfaction through customer focus approaches also increases employee satisfaction, and this, in turn, improves employee retention rates and the ability to continue practicing patient-centred care (Stewart 2000). Patient centred care is therefore regarded as an integral component of Quality healthcare provision (Edgcumbe 2009).

4.9.2 Leadership and Quality Healthcare provision in private facilities

The study found that Leadership highly influences Quality healthcare provision in Avenue Hospital, Kenya. The study further established that when Quality is considered as a strategic priority by the management, it greatly influenced Quality Healthcare provision. Hiring of department heads and other employees based on quality performance also influences Quality healthcare provision. This concurs with a study by Keroack (2007), who asserted that successful leaders in Health facilities were passionate about improving quality, safety and service and had a hands-on style, making efforts to stay in tune with issues at the front line and this greatly influences Quality healthcare provision. According to Fahad Al-Mailam (2005), quality
leadership in health care organizations helps foster an environment that provides quality care which is linked with patient satisfaction. Organizations who seek to improve patient satisfaction should focus on improving the quality of Leadership. Quality leadership that provides empowering work environments are more likely to result in engaged employees and tend to be the most successful at increasing the quality of care provided. This again gets at the point that management plays an integral role in the level of care provided even when they are not directly involved.

4.9.3 Employee involvement and Quality healthcare provision in private facilities.

The study established that Employee involvement influences Quality healthcare provision to a weak extent. The study is in contrary with a study done by (Atkins, 1996) who outlines that while some improvements in Quality healthcare provision can be reached through investments in technology and infrastructure, the most dramatic improvements are achieved though people. Previous studies have concluded that not involving employees makes them unsatisfied and this negatively affects the quality of services which adversely affects patient satisfaction and loyalty to a hospital. One of the Key aspects of Employee involvement is delegating of tasks and responsibility. However delegation of tasks to personnel who do not have the required skills may not be effective. When the resources/infrastructure necessary to accomplish a delegated task is not available and where there is no accountability / follow ups on the delegated person this curtails the whole aspect of employee involvement.

4.9.4 Continuous improvement and Quality healthcare provision in private facilities

The study unequivocally found out that Continuous improvement does not influence Quality healthcare provision in Avenue Hospital, Kenya. Hirschhorn (2000) argues that a central problem for many healthcare systems is how to organize and manage improvements. To succeed with change and improvement, behavior, the culture of beliefs and values in the organization must change. The complexity and culture in healthcare has sometimes been mentioned as a barrier that explains why change and improvement progress are slow (Leape & Berwick, 2005). Hirschhorn (2000) then argues that to achieve change in the organization, the culture must be considered. What is seen as the right way to do things must change, so the improvement becomes the right way instead. Other researchers also agree on the importance of changing the culture to
accomplish sustainable change (Ekvall, 1996; Ahrenfelt, 2001) However, Continuous Improvement implementation is demanding on individuals and organizations. It requires sustained leadership, extensive training and support, robust measurement and data systems, realigned incentives and human resources practices, and cultural receptivity to change (Shortell et al. 2004). In addition, the systemic nature of many quality problems implies that the effectiveness of a CI initiative may depend on its implementation across many conditions, disciplines, and departments. This too often proves challenging (Gustofson et al. 1997).
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study findings, conclusions and recommendations. The findings are summarized in line with the objectives of the study. The independent variables were Customer Focus, Leadership, Employee involvement and Continuous improvement. These independent variables were studied against the dependent variable which Quality Healthcare Provision in Avenue Hospital, Kenya.

5.2 Summary of findings

The study findings have been summarized as per the themes as follows:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Data Collection instrument</th>
<th>Type of analysis</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Customer focus in Quality Healthcare provision</td>
<td>Questionnaire</td>
<td>Descriptive/Inferential statistics</td>
<td>The study established that there exists a significant relationship between Customer Focus and Quality healthcare provision (with t statistics p&lt;0.05) at a coefficient of 0.822</td>
</tr>
<tr>
<td>Influence of Leadership in Quality healthcare provision</td>
<td>Questionnaire</td>
<td>Descriptive/Inferential statistic</td>
<td>The study established that there exists a significant relationship between Leadership and Quality healthcare provision (with t statistics p&lt;0.05) at a coefficient of 0.777</td>
</tr>
</tbody>
</table>
Influence of Employee involvement in Quality healthcare provision

Influence of Continuous improvement in Quality healthcare provision

<table>
<thead>
<tr>
<th>Influence of Employee involvement in Quality healthcare provision</th>
<th>Questionnaire</th>
<th>Descriptive/Inferential statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The study established that there exists no significant relationship between employee involvement and Quality healthcare provision with (with t statistics p&lt; 0.023&lt;0.05) at a coefficient relation of 0.478</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Influence of Continuous improvement in Quality healthcare provision</th>
<th>Questionnaire</th>
<th>Descriptive/Inferential statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The study established that there exists no significant relationship between Continuous improvement and Quality healthcare provision with (with t statistics p&lt; 0.023&lt;0.05) at a coefficient relation of 0.279</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3 Conclusions

5.3.1 Conclusion on Customer Focus and Quality healthcare provision in private facilities

The study found out that Customer Focus highly influences Quality healthcare provision in Avenue Hospital, Kenya. Customer Focus indicators such as knowing patient needs/expectations and employing Customer requirements and expectations as the basis for Quality and making of quick responses upon any inquiry had the highest mean scores. The findings are in line with a study by Whiteley and Hessan (1997) which explains that placing the customers at the center of
the business operations and listening to their needs will improve the health facilities’ image in a way that would enhance its profits and success as it leads to provision of Quality services. Benefits associated with Customer focus in health care include decreased mortality, decreased emergency cases and return visits, fewer medication errors, lower infection rates; increase both patient and doctor satisfaction; increase patient engagement and task orientation; reduce anxiety; and improve quality of life. Customer focus in health care can also increase efficiency through fewer diagnostic tests and unnecessary referrals, and reduce hospital attendance rates (Fremton2001) Increasing patient satisfaction through customer focus approaches also increases employee satisfaction, and this, in turn, improves employee retention rates and the ability to continue practicing patient-centred care (Stewart 2000) . Patient centred care is therefore regarded as an integral component of Quality healthcare provision (Edgcumbe 2009)

5.3.2 Conclusion on Leadership and Quality Healthcare provision in private facilities

The study found that Leadership highly influences Quality healthcare provision in Avenue Hospital, Kenya. The study further established that when Quality is considered as a strategic priority by the management it greatly influenced Quality Healthcare provision. Hiring of department heads and other employees based on quality performance also influences Quality healthcare provision. This concurs with a study by Keroack (2007), who asserted that successful leaders in Health facilities were passionate about improving quality, safety and service and had a hands-on style, making efforts to stay in tune with issues at the front line and this greatly influences quality healthcare provision. According to Fahad Al-Mailam (2005), quality leadership in health care organizations helps foster an environment that provides quality care which is linked with patient satisfaction. Organizations who seek to improve patient satisfaction should focus on improving the quality of Leadership. As many studies suggest, quality leadership that provides empowering work environments are more likely to result in engaged employees and tend to be the most successful at increasing the quality of care provided. This again gets at the point that management plays an integral role in the level of care provided even when they are not directly involved.
5.3.3 Conclusion on Employee involvement and Quality healthcare provision in private facilities.
The study established that employee involvement influences Quality healthcare provision to a weak extent. The study is in contrary with a study done by Atkins (1996) who outlines that while some improvements in quality healthcare provision can be reached through investments in technology and infrastructure, the most dramatic improvements are achieved through people. Previous studies have concluded that not involving employees makes them unsatisfied and this negatively affects the quality of services which adversely affects patient satisfaction and loyalty to a hospital. One of the Key aspects of employee involvement is delegating of tasks and responsibility. However delegation of tasks to personnel who do not have the skills may not be effective. When the resources/infrastructure necessary to accomplish a delegated task is not available and where there is no accountability / follow ups on the delegated person this curtails the whole aspect of employee involvement.

5.3.4 Conclusion on Continuous Improvement and Quality healthcare provision in private facilities
The study unequivocally found out that Continuous improvement does not influence Quality healthcare provision in Avenue Hospital, Kenya. Hirschhorn (2000) argues that a central problem for many healthcare systems is how to organize and manage improvements. To succeed with change and improvement, behavior, the culture of beliefs and values in the organization must change. The complexity and culture in healthcare has sometimes been mentioned as a barrier that explains why change and improvement progress are slow (Leape & Berwick, 2005). Hirschhorn (2000) then argues that to achieve change in the organization, the culture must be considered. What is seen as the right way to do things must change, so the improvement becomes the right way instead. Other researchers also agree on the importance of changing the culture to accomplish sustainable change (Ekvall, 1996; Ahrenfelt, 2001). However, Continuous Improvement implementation is demanding on individuals and organizations. It requires sustained leadership, extensive training and support, robust measurement and data systems, realigned incentives and human resources practices, and cultural receptivity to change (Shortell et al. 2004). In addition, the systemic nature of many quality problems implies that the effectiveness of a CI initiative may depend on its implementation across many conditions, disciplines, and departments. This too often proves challenging (Gustofson et al. 1997).
5.4 Recommendations
1. On the basis of the findings obtained these studies recommends that any Organization, Manager, Employer and Donor should invest much of their energies in Customer Focus approaches and Leadership approaches in order to have Quality healthcare provision especially in Private Facilities

2. Secondly, a considerable amount of Organizational commitment should be directed toward implementation of Total Quality Management Principles in order to have Quality Healthcare provision. The Organization structure could also be significantly influential on Quality healthcare provision.

5.5 Suggestions for Further Research
On the basis of what has been found out from this study, the researcher makes the following Suggestions for further research;

1. That a comprehensive study be undertaken to find out the joint influence of Customer Focus, Leadership, Employee involvement and Continuous improvement in Quality healthcare provision in private Health facilities in Kenya. A detailed study by establishing joint influences could give a clearer relationship between these variables.

2. The researcher also recommends that a detailed study be undertaken to establish the relationship between Customer Focus, Leadership, Employee involvement and Continuous improvement in Quality healthcare provision in public Health facilities in Kenya. This would perhaps give a comparison on these aspects both in the private and public sector Health facilities in Kenya.
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APPENDIX I

LETTER OF TRANSMITTAL OF DATA COLLECTION INSTRUMENTS

Mercy Kemunto Barake
Email:mercybarake@gmail.com
5th October, 2015

Dear Respondent,

RE: Influence of Total Quality Management Principles on Quality healthcare provisions in private Health institutions

I am a Master’s student at the School of Continuing and Distance Education at the University of Nairobi currently conducting a research study as entitled above.

You have been selected as one of the respondents to assist in providing the requisite data and information for this undertaking. I kindly request you to spare a few minutes and answer the attached questionnaire. The information so obtained will be used for academic purposes only, will be treated with utmost confidentiality and will not be shared with anyone whatsoever. Do not write your name anywhere on the questionnaire.

I therefore beseech you to respond to all questions with utmost honesty.

Thanking you most sincerely for your support.

Yours Sincerely,

Mercy Kemunto Barake
0736226737
APPENDIX II

QUESTIONNAIRE

This questionnaire is designed to gather research information regarding Total Quality Management principles on healthcare provision in Kenya. The questionnaire has six sections. Kindly do not write your name on the questionnaire. For each section, kindly respond to all items using a tick [    ] or filling in the blanks where appropriate. All the information volunteered will be treated with utmost confidentiality.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1.1 Respondent’s Particulars

a) Title/designation………………………………………………………………………………

b) How long have you worked for this health institution?
   (Please tick appropriate age bracket)

<table>
<thead>
<tr>
<th>0-2 years</th>
<th>3-5 years</th>
<th>6-8 years</th>
<th>9-11 years</th>
<th>12-14 years</th>
<th>15 and above</th>
</tr>
</thead>
</table>

c) What is your highest level of education?

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Diploma</th>
<th>First Degree</th>
<th>Master’s Degree</th>
<th>PhD</th>
<th>Other-Specify</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>Diploma</td>
<td>First Degree</td>
<td>Master’s Degree</td>
<td>PhD</td>
<td>Other-Specify</td>
</tr>
<tr>
<td>Certificate</td>
<td>Diploma</td>
<td>First Degree</td>
<td>Master’s Degree</td>
<td>PhD</td>
<td>Other-Specify</td>
</tr>
<tr>
<td>Certificate</td>
<td>Diploma</td>
<td>First Degree</td>
<td>Master’s Degree</td>
<td>PhD</td>
<td>Other-Specify</td>
</tr>
<tr>
<td>Certificate</td>
<td>Diploma</td>
<td>First Degree</td>
<td>Master’s Degree</td>
<td>PhD</td>
<td>Other-Specify</td>
</tr>
<tr>
<td>Certificate</td>
<td>Diploma</td>
<td>First Degree</td>
<td>Master’s Degree</td>
<td>PhD</td>
<td>Other-Specify</td>
</tr>
</tbody>
</table>

D) Specify your professional category

<table>
<thead>
<tr>
<th>Doctor</th>
<th>Laboratory technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td>Pharmacist</td>
</tr>
<tr>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>Psychological Counselors</td>
<td></td>
</tr>
<tr>
<td>CEO</td>
<td></td>
</tr>
</tbody>
</table>

e) Specify your age bracket

<table>
<thead>
<tr>
<th>Below 20</th>
<th>20-25</th>
<th>26-30</th>
<th>31-35</th>
<th>36-40</th>
<th>40 and above</th>
</tr>
</thead>
</table>
1.2 Basic Information

1. Is there a quality Assurance department in the hospital?
   [  ] Yes [  ] No [  ] I don't Know

2. Are there any clear Quality objectives for health services in the hospital?
   [  ] Yes [  ] No [  ] I don't Know
   If the answer is yes in question 2, please explain: ..............................................................
   ……………………………………………………………
   ……………………………………….

3. Are there any measurable standards to assess the quality of the health services
   Provided by the hospital?
   [  ] Yes [  ] No [  ] I don't Know

4. Is there any program for implementing Total Quality Management (TQM) in your
   Hospital?
   [  ] Yes [  ] No [  ] I don't Know
   (If the answer is yes in question 4, answer question 5.)

5. How long has Total Quality Management program been established in your Hospital?
   a) One year ago
   b) Three years ago
   c) Two years ago
   d) More than three years
SECTION B: CUSTOMER FOCUS IN HEALTHCARE

2.1 To what extent are the following Customer focus approaches used in your Hospital?

Use the scale where 5= to a great extent, 4= high extent, 3= moderate extent 2= small extent and 1= Not at all

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The hospital is interested in knowing patient needs and expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 We use customer requirements and expectations as the basis for quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 We always make quick responses upon any inquiry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Processes in our hospital are designed/improved based on customers’ requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 We invent new ways of service delivery to satisfy our customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 There is an effective system for solving the patient problems and complaints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Our hospital is in close contact with patients and other customers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Our customers give us feedback on quality and delivery performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Our hospital regularly carries out external customers’ satisfaction survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Our hospital’s top management makes strategic quality planning based on customers’ requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Our hospital has good plans for emergency to ensure normal patient’s services are not interrupted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION C: EMPLOYEE INVOLVEMENT IN HEALTHCARE

3.1 To what extent do the following employee involvement approaches applied in your institution?

Use the scale where 5 = to a great extent, 4 = high extent, 3 = moderate extent, 2 = small extent and 1 = Not at all

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Employees are encouraged to participate in making decisions pertaining to quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Quality-related training given to employees throughout the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 The incentive system focuses on teamwork without overlooking individual distinction in performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Our employees are recognized with non-monetary incentives for superior quality performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Our employees are recognized with monetary incentives for superior quality performance. There is delegation of authority to the employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 There is provision of safe working conditions (i.e. Protective clothing, medical insurance) to employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION D: CONTINUOUS IMPROVEMENT IN HEALTHCARE

4.1 To what extent are the following Continuous improvement approaches applied in your institution?

Use the scale where 5 = to a great extent, 4 = high extent, 3 = moderate extent, 2 = small extent and 1 = Not at all

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Our hospital’s top management supports a long-term quality improvement process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Our hospital’s top management provides the necessary resources for continuous improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Employees participate in continuous improvement decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4 The continuous improvement of processes carried out through teamwork

5 Employees are encouraged to experiment and try out new approaches

6 The hospital management encourages you to participate in continuous education in your field of specialization

7 There are continuous meetings to discuss processes that enhance the continuous improvement of quality

8 Our hospital gives feedback to employees on their quality performance

9 There are explicit work's policies to assist you to Continuous improving the process

**SECTION E: LEADERSHIP IN HEALTHCARE**

5.1 Specify to what extent the following Leadership approaches applied in your institution?

Use the scale where 5= to a great extent, 4= high extent, 3= moderate extent 2= small extent and 1= Not at all

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality is considered as a strategic priority by the leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Our hospital’s top management and major department heads are hired based on quality performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Our hospital’s top management and major department heads are evaluated and promoted based on quality output</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The hospital leadership is interested in employing people of high competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Major department heads and employees are involved by</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the leadership in quality planning

6 Commitment of the hospital’s top management to employee training in quality

7 There is a hospital-wide quality statement

8 Employees are recognized with incentives for outstanding quality performance by the leadership

SECTION F: QUALITY HEALTHCARE PROVISION

6.1 Specify to what extent the following are true.

Use the scale where 5= to a great extent, 4= high extent, 3= moderate extent 2= small extent and 1= Not at all

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality goals and policy are understood within the hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The Hospital has the medical facilities (medical labs, beds, machines and equipment) and the right number of staff to meet the growing demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The Hospital adheres to all the laid down operational standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The hospital has a quick response time to customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The hospital has attracted and retained competent employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The management acts on customer feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The Hospital services are on high demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The Hospital has Automated systems for its operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>We have audits conducted on our institution</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Thank you for your Participation
APPENDIX III

TABLE FOR DETERMINING SAMPLE SIZE FOR A GIVEN POPULATION

<table>
<thead>
<tr>
<th>N</th>
<th>S</th>
<th>N</th>
<th>S</th>
<th>N</th>
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<th>S</th>
<th>N</th>
<th>S</th>
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<tbody>
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<td>10</td>
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<td>100</td>
<td>80</td>
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<td>165</td>
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</tr>
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<td>19</td>
<td>120</td>
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<td>1000</td>
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<td>360</td>
<td>186</td>
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<td>285</td>
<td>5000</td>
<td>357</td>
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<td>36</td>
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<td>113</td>
<td>380</td>
<td>181</td>
<td>1200</td>
<td>291</td>
<td>6000</td>
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<td>400</td>
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Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970