



**ST. MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**  
**INSTITUTE OF QUALITY AND PRODUCTIVITY MANAGEMENT**

**EVALUATION OF QUALITY MANAGEMENT SYSTEM  
IMPLEMENTATION IN HEALTHCARE SERVICE: A CASE OF  
ST. PAUL HOSPITAL MILLENNIUM MEDICAL COLLEGE  
(SPHMMC)**

**BY: BETHELHEM KEDIR**

**MAY, 2022**

**ADDIS ABABA, ETHIOPIA**

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**Approved by Board of examiners**

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## **DECLARATION**

I, the undersigned, certify that this research work titled “Evaluation of quality management system implementation in healthcare service: A case of St. Paul hospital millennium medical college” is my original work performed under the supervision of my research advisor AMARE MATEBU (PhD) and has not been presented elsewhere for assessment and for a degree in any other university. All sources of materials used for this thesis have also been duly acknowledged.

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**Date: May, 2022**

## ENDORSEMENT

This Thesis has been submitted to St. Mary's University School of Graduate Studies for examination with my approval as University advisor.

Advisor; Amare Matebu (PhD)

Signature:  \_\_\_\_\_

Date: 27, May, 2022  
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## **List of Abbreviation and Acronyms**

BPR.....	Business Process Reengineering
EHAQ.....	Ethiopia Hospital Alliance for Quality
EHSTG.....	Ethiopian hospital Services Transformation Guideline
FMOH.....	Federal Ministry of Health
HSDP.....	Health Sector Development Plan
IOM.....	International Organisation for Migration
ISO.....	International Organization for Standardization
KPI.....	Key Performance Indicator
OPD.....	out Patient Doctor
QMS.....	Quality Management System
SPHMMC.....	St. Paul Hospital Millennium Medical College
SPSS.....	Statistical Package for Social Science
TQM .....	Total Quality Management

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## **Abstract**

*This research has been conducted to evaluate the quality management system implementation in healthcare service in the case of St. Paul hospital millennium medical college (SPHMMC). The research has adopted a qualitative and quantitative approach. A descriptive research approach was employed using a questionnaire and interview to get primary data from employees of SPHMMC and the secondary sources of data were the literatures available and the documents related to QMS. The data were collected with a response rate of 100% from the distributed one hundred sixty seven (167) questionnaires and analysed using descriptive statistics focusing on the mean, standard deviation and percentages, which is calculated using statistical package for the social sciences (SPSS) version 26. The research work has identified lack of employee's commitment, lack of resources allocation, insufficient training about QMS implementation as a challenge to implementation of Quality Management System in the Organization. The benefits of the SPHMMC from implementation of QMS practices also listed in this study such as, increase patient and employee' satisfaction, reduce medical error, competitive advantage. This study finally recommended that all potential problems identified in the implementation of QMS to be given a due attention and appropriate preventive and corrective actions planned ahead during the planning and development stage of the system.*

*Key words: Quality Management System, SPHMMC*

# CHAPTER ONE

## 1. INTRODUCTION

This chapter consists of background of the study, statement of the problem, research questions, general and specific objective of the study, significance of the study, limitation of the study, scope of the study and organization of the study.

### 1.2 Background of the study

Quality management system (QMS) can be defined as ‘a set of coordinated activities to direct and control an organisation in order to continually improve the effectiveness and efficiency of its performance’. It comprises of collective policies, plans, practices and the supporting infrastructure by which an organization aims to reduce and eventually eliminate non-conformance to specifications, standards and customer expectations in the most cost effective and efficient manner.

QMS as a system consists of the following elements: organization, processes, documents, resources. A quality management system is a set or network of many of interrelated or interacting and interconnected processes (elements) that organizations use to direct and control how quality policies are implemented and quality objectives are achieved. A process-based quality management system uses a process approach to manage and control how its quality policy is implemented and how its quality objectives are achieved. A process-based QMS is a network of interrelated and interconnected processes. Each process uses resources to transform inputs into outputs. Since the output of one process becomes the input of another process, processes interact and are interrelated by means of such input-output relationships. These process interactions create a single integrated process-based QMS. (Naresh Goel et al).

Healthcare is an industry that constantly needs improvements. All the regulatory standards must be retained with the utmost precision to offer quality care to the patients. The quality management system has a key role to play in everyday processes conducted in the healthcare industry and helps professionals to achieve their quality targets. A quality management system can streamline key processes, including performance evaluation, staff planning and training, and patient satisfaction for the healthcare industry. Here’s an overview of all the features that you can leverage to efficiently manage the quality processes for your healthcare organization:

- Meet Compliance Standards
- Improved Patient Satisfaction
- Better Storage & Safety for Patient Data
- Extended Support for Current Teams
- Efficient Supplier Management
- Secure & Easy Access for Decision Makers
- Better Storage & Safety for Patient Data

Patient data has become one of the important considerations for the hospital teams especially when it comes to the implementation of the QMS systems. They must ensure that all the patient data is documented well and protected against threats like hacking and data theft. This implies the implementation of the secure QMS systems that can notify hospital teams every time patient data is accessed. A digital document management system with electronic signature access can safeguard the patient data throughout the hospital network.

#### **Extended Support for Current Teams**

With a secure quality management system, healthcare professionals can gain more insights on previous records. They can access all the historical data related to the patient and their medical requirements that can be utilized for optimizing the workflows and processes with time. Advanced QMS for healthcare also help current teams to mitigate the risks and improve their regular processes while offering instant access to the information. This contributes to faster, effective, and improved decision-making processes.

#### **Meet Compliance Standards**

Meeting compliance standards is quintessential for the healthcare industry. The professionals must adopt the best practices in order to conform to the regulatory standards. A Quality Management System for Healthcare can help ensure that all your team members are on the same page to comply with the regulations. It allows teams to review their day-to-day activities and the targets they need to meet. If they meet the targets, then they need to maintain the process consistency to meet those targets every time. The software creates the perfect environment to identify, track, and resolve the compliance issues in the organization.

#### **Secure and Easy Access for Decision Makers**

In the healthcare environment, decision-making basically revolves around improving patient healthcare. All their information needs to be recorded and protected against unauthorized access. Hence, a secure QMS for healthcare is required to create the hierarchy of the people who will be allowed to access patient critical data.

### **Improved Patient Satisfaction**

Accessibility to healthcare services is a basic need. But it requires more than just accessibility. The quality care is of supreme importance, which you can ensure with a quality management system that allows you to track all the information about the patient. What benefitted the health of the patient or vice-versa, you can get all the details in a systematic manner through a quality management system and make informed decisions for improved services to drive patient satisfaction.

### **Efficient Supplier Management**

Patient care is of utmost importance, but how will you deliver the services and quality care when you will not have the right equipment or medicines. Here supplier quality management plays a vital role. A QMS solution can help you track and monitor the performance of associated suppliers to ensure the right medicines, equipment, and machines are delivered.

The goal of the healthcare system is to provide ideal care from a qualified provider in an appropriate setting for a particular patient. In other words, the patient is to receive the best possible care (i.e., standard of care based on evidence-based medicine) by a provider with the right expertise in a setting that maximizes efficiency and minimizes risk and abuse of resources—all the while treating the patient with respect and allowing involvement in care plan as the patient desires. In recent years, six domains have been identified by International Organisation for Migration (IOM) that help to achieve a high degree of quality; health care must be safe, effective, patient centered, timely, efficient, and equitable. Meeting all these domains is at the core of quality management. “Safe” pertains to preventing harm to patients stemming from the care they are receiving. “Effective” uses evidence-based care with the correct utilization of resources. “Patient-centered” refers to care that is receptive and considerate of the patient’s inclination, needs, and values to guide all clinical decisions. “Timely” focuses on preventing delays in care. Efficient” relates to minimizing or avoiding waste of resources such as supplies and time. Lastly, “equitable” indicates providing care to all patients regardless of characteristics such as appearance, socioeconomic status, and values. The success of health care in achieving these quality domains can be measured by

collecting data and evaluating “the five D’s:” death (mortality), disability (morbidity), disease (resolution or persistence of disease following treatment), discomfort (the process of providing medical care) and dissatisfaction (the patient’s experience during the process of providing care). (Seelbach CL, Brannan GD 2021).

In healthcare, quality management refers to the administration of systems design, policies, and processes that minimize, if not eliminate, harm while optimizing patient care and outcomes. The objective of quality management is to ensure that a particular product, service, or organization will consistently fulfil its intended purpose. To achieve this, there is a constant collection of data and alterations in process to create an optimal product or service that fulfils its intention and satisfies the consumer. Further data is then collected to ensure that no additional changes are necessary. Quality management systems (QMS) are tools used to implement quality management and organize, standardize, and improve activities involving a product or service aimed at customers. By measuring outcomes and effects of different factors via data collection, issues within the system are identified, and evidence-based medicine and resources are used to develop or alter processes to improve the quality of care. Information is then collected regarding new outcomes to determine if the changes were beneficial or if other alterations are required. The ultimate goal is to achieve consistent, high-level care with minimal morbidity, mortality, disease, discomfort, and high patient satisfaction while meeting or exceeding all six of the IOM domains (safe, effective, patient-centered, timely, efficient and equitable care). (Seelbach CL, Brannan GD 2021)

Over the previous 20 years, Ethiopian Federal Ministry of Health (FMOH) progressively focused on how to improving the quality care by using such as Health Sector Development Plan (HSDP) Business Process Reengineering (BPR) and Balanced Scorecard. FMOH now a day implementing Kaizen, a quality improvement methodology adopted across multiple sectors in the country, as a means of achieving better health care and health outcomes. (FMOH, 2012).

The Ethiopian Hospitals Management Enterprise, which was established in 2006, is an original inventiveness to introduce a standardized based quality approach. The hospital reform was supplemented by the introduction of Key Performance Indicators (KPI) for hospitals through the hospital performance monitoring and improvement guideline in 2011. The Ethiopian Hospitals Alliance for Quality (EHAQ) is based on experiences in implementing Ethiopian Hospital Service Transformation Guidelines. (Elizabeth et al, 2008).

Healthcare institution is a place, organization or agency, public or private that provides healthcare related facilities and services. These include medical, nursing, nursing screening or therapeutic services, medical drugs and medical laboratory service to the inpatient and outpatients. In Ethiopia there are many healthcare service organizations, one of the institutions or organization is St. Paul hospital millennium medical college.

St. Paul hospital millennium medical college (SPHMMC) is a leading public hospital and medical college in Addis Ababa, Ethiopia. It was established with the intent to help poor people who could not cover medical expenses. SPHMMC was one of the seven institutions in the country giving training in nursing. After serving the nation only as a hospital for 60 years, St. Paul opened a medical college during the Ethiopian millennium celebration in 2007. So, the ministry of health named it St. Paul's hospital millennium medical college (SPHMMC). It gives medical service with the coordinate of different department and implements quality management to deliver quality service to patients. ST. Paul Hospital Millennium Medical College is Awarded 3,000,000 (Three Million Birr) from EHAQ for their Efforts toward better care. This study demonstrates principles of Quality Management Systems and techniques which are considered practical in St. Paul hospital millennium medical college (SPHMMC website). The study examines the level of current quality management activities and identifies quality management implementation challenges and gives a recommendation to solve the gap which faces in the hospital.

## **1.2 Statement of problem**

Today hospitals are being challenged to look at their operations and find more efficient ways to do business. Quality service in hospital system is major challenge that needs to be address. Patient handover, medication reconciliation, medication errors and hospital infections are important issues that are related to patient safety. Ineffective handovers can result in adverse events and patient safety risks, as is the case for medication errors (Friesen et al., 2008).

The Quality Management System supports stable processes and their better management. QMS in hospitals brings safety to the patient, technical proficiency, good behaviour of staff toward the patients, cheerful treatment environment, on-time accurate treatment, maintaining correct treatment procedures, patient feedback and immediate action, proper record keeping, proper diagnostic services and etc. (Roy and Dr.Ghose, 2018). Many hospitals are turning towards QMS for cutting costs and overall improvement in the quality of the services



provided. Quality management and quality management systems are widely advocated in health care. Some of the main reasons for this development are: the increasing complexity of health institutions and systems, the focus on efficiency and effectiveness, the pressure on cost-reduction, the on-going process of sub specialisation and individualisation and strengthening of the position of the client.

According to Kim et, al (2011) The most important barriers of QMS implementation in the organizations are classified as: leadership; training, involvement of all; organizational resources; culture oriented to quality and a new one that is integration between the areas involved which is related to the communication and team work.

Noussaiba Bunabri et, al (2018) concludes that lack of communication; poor top management commitment and insufficient training are the obstacles to QMS implementation.

In one major study of (Saraph, Benson and Schoeder), classified the critical factors of quality management have been classified into eight categories as follows: The role of management leadership, the role of the quality department, training, product/service design, supplier quality management, process management, quality data and reporting and employee relations. The authors intended that these eight factors be representative of the entire quality management practices construct.

There are many challenges raised behind the quality management system implementation in hospital settings. These factors are hospitals structure poor top managerial commitment, poor resource allocation, low level of employee participation and training on QMS, procedure development and employees' attitude and defect as well as lack of effective communication system on QMS are significantly associated with quality management system in surveyed hospitals. (Hazilah N, Manaf A 2002)

SPHMMC hospital has also deals with many of challenges as discussed the above barriers commonly arise in healthcare organization in QMS implementation like lack of employee commitment or poor engagement of employee, lack of financial resource, lack of employee training on QMS Due to these and other factors the organization has still experience a number of customers complaint on quality of their service. if QMS implemented properly, it produce a variety of benefits such as meeting customers' needs, improved internal communication and better problem solving capacity of the firm (cheroigin 2014) So the aim of this research is to evaluate the level of quality management system implementation,

assessing practice and challenges of implementing QMS, and suggests improvement intervention for the next implementation.

### **1.3 Objectives of Research**

#### **1.3.1 General Objective**

The main objective of this study is to evaluate the implementation of quality management system in the healthcare service in the case of St. Paul hospital Millennium medical college and give a recommendation to solve the gaps which faced in the case of organization.

#### **1.3.2 Specific objectives**

The aims of this study can be summarized in the points below

- To evaluate the existing quality management system implementation in St. Paul hospital millennium medical college (SPHMMC).
- To identify good practices and challenges of Quality management system implementation in St. Paul hospital millennium medical college.
- To determine the best way of implementing quality management system in healthcare service.

### **1.4 Research question**

1. What is the current level of QMS principles execution in St. Paul hospital millennium medical college?
2. What are the good practices and challenges of QMS implementation in St. Paul hospital millennium medical college?
3. What is the best way to implement QMS in health care services?
4. What are the benefits of implementing QMS in improving the health care service?

### **1.5 Significance of the study**

This study was offered a valuable opportunity to focus on the assessment of quality management system implementation level and challenges in the St. Paul hospital millennium medical college and to identify and give correction on existed problems and will be recommended the resolution. Thus in conducting this research gives great importance:

For the organization: to be beneficiary that identified challenges and recommended solution of the study will help the hospital to improve their quality service.

For researcher: to be beneficiary on getting knowledge about the QMS implementation.

For the patients: to be beneficiary to receive the best possible care by a provider or professionals.

The purpose of this study is, therefore, to assess level of implementation, gaps and challenges in the hospital and give a useful insight/ recommendation to the hospital to solve the problems and improve quality management system implementation

### **1.6 Scope and limitation of the research**

The scope of this research is to focus on evaluating the quality management system implementation in St. Paul hospital millennium medical college for quality improvement. This research was conduct on all departments such as quality department, all laboratory departments, pharm department, OPD, administrative staff and other department. And in the meantime there were a constraint during the research study like current COVID 19 pandemic as a medical institution.

### **1.7 Organization of Research**

The research comprises five chapters and appendixes. The research content listed as follow:

Chapter One Introduction: This section presents about background of the research, Statement of problem, Research question, Research objective, Significance of the research, Scope and Limitation of the Research,

Chapter Two Literature review: This section presents the literature review part of the study which will include the theoretical review in its first section followed by the review of the previous studies related to the area of quality management system in health care.

Chapter Three Methodology: This section discuss about the methodology part of the study which include research design, study area and population, the sample size and sampling technique, data sources and collection instrument, data analysis method.

Chapter four Results and Discussion: This section presents the results/ finding of the study and interpreting the findings.

Chapter five Summary, Conclusion and Recommendation: It discusses the summary, conclusion and recommend of findings that should be drawn from the result.

## Chapter Two

### 2. Literature review

#### 2.1 Quality management system concept and principle

Quality management is the act of overseeing different activities and tasks within an organization to ensure that products and services offered, as well as the means used to provide them are consistent. It helps to achieve and maintain a desired level of quality within the organization.

Quality management consists of four key components, which include the following:

**Quality Planning** – The process of identifying the quality standards relevant to the project and deciding how to meet them.

**Quality Improvement** – A process to improve the confidence or reliability of the outcome.

**Quality Control** – is one part of quality management and it is a set of activities intended to ensure that quality requirements are actually being met.

**Quality Assurance** – The systematic or planned actions necessary to offer sufficient reliability so that a particular service or product will meet the specified requirements.

The aim of quality management is to ensure that all the organization's stakeholders work together to improve the company's processes, products, services, and culture to achieve the long-term success that stems from customer satisfaction.

The process starts when the organization sets quality targets to be met and which are agreed upon with the customer. The organization then defines how the targets will be measured. It takes the actions that are required to measure quality. It then identifies any quality issues that arise and initiates improvements. The final step involves reporting the overall level of the quality achieved. The process ensures that the products and services produced by the team match the customers' expectations.

#### Principle of QMS

There are several principles of quality management that the International Standard for Quality Management adopts. These principles are used by top management to guide an organization's processes towards improved performance. They include:

## 1. Customer focus

The primary focus of any organization should be to meet and exceed the customers' expectations and needs. When an organization can understand the customers' current and future needs and cater to them, those results in customer loyalty, which in turn increases revenue. The business is also able to identify new customer opportunities and satisfy them. When business processes are more efficient, quality is higher and more customers can be satisfied.

## 2. Leadership

Good leadership results in an organization's success. Great leadership establishes unity and purpose among the workforce and shareholders. Creating a thriving company culture provides an internal environment that allows employees to fully realize their potential and get actively involved in achieving company objectives. Leaders should involve the employees in setting clear organizational goals and objectives. This motivates employees, who may significantly improve their productivity and loyalty.

## 3. Engagement of people

Staff involvement is another fundamental principle. The management engages staff in creating and delivering value whether they are full-time, part-time, outsourced, or in-house. An organization should encourage the employees to constantly improve their skills and maintain consistency. The principle also involves empowering the employees, involving them in decision making, and recognizing their achievements. When people are valued, they work to their best potential because it boosts their confidence and motivation. When employees are wholly involved, it makes them feel empowered and accountable for their actions.

## 4. Process approach

The performance of an organization is crucial according to the process approach principle. The approach principle emphasizes achieving efficiency and effectiveness in the organizational processes. The approach entails an understanding that good processes result in improved consistency, quicker activities, reduced costs, waste removal, and continuous improvement. An organization is enhanced when leaders can manage and control the inputs and the outputs of an organization, as well as the processes used to produce the outputs.

## 5. Continuous improvement

Every organization should come up with an objective to be actively involved in continuous improvement. Businesses that improve continually experience improved performance, organizational flexibility, and increased ability to embrace new opportunities. Businesses should be able to create new processes continually and adapt to new market situations.

#### 6. Evidence-based Decision Making

Businesses should adopt a factual approach to decision-making. Businesses that make decisions based on verified and analysed data have an improved understanding of the marketplace. They are able to perform tasks that produce desired results and justify their past decisions. Factual decision-making is vital to help understand the cause-and-effect relationships of different things and explain potential unintended results and consequences.

#### 7. Relationship management

Relationship management is about creating mutually beneficial relations with suppliers and retailers. Different interested parties can impact a company's performance. The organization should manage the supply chain process well and promote the relationship between the organization and its suppliers to optimize their impact on the company's performance. When an organization manages its relationship with interested parties well, it is more likely to achieve sustained business collaboration and success.

### **2.2 Quality Management in health care**

Quality management in health care works to reduce errors and improve patient care. The safety and effectiveness of treatment are two of the most critical measures of quality. The ever-increasing demands of healthcare consumers is a great concern in the global healthcare sector, and only by providing high-quality, advanced treatment options at affordable rates, hospitals or other healthcare providers can establish sustainable and successful business. To pursue this, the significant standards to be set for better 'Hospital Quality Management'. Any healthcare organization can attain this by streamlining the process and workflows educating, monitoring and implementing quality improvement programs. In addition, applying statistical quality management solutions based on statistical data will enable the hospital management to increase patient and physician satisfaction considerably

Hospital quality management means the process of managing the entire entailed hospital operation in a worthwhile fashion by applying the various hospital quality measures and standards, so that the hospital functions in a desirable condition. The Indian hospital system

follows NABH Quality Standards, which provides guidelines to healthcare administrators and also facilitates the overall hospital functions to remain exceptional and patient-friendly. However, the hospital management has to control all the related activities prudently, by applying the appropriate hospital quality measures, with special attention to the key areas of organizational activities such as the process improvement, cost reduction, productivity & performance improvement, and throughput time.

The content quality in health care is determined and evaluated by the expectations of the health care professionals. The delivery quality of the health care service is determined by the patient satisfaction, is based on the patient expectations and linked with training and human interpersonal relations.

The quality of services being provided to patients is highly crucial. The traditional view of quality control aimed at defect detection while the current concept aims at the defect prevention, continuous process improvement, and outcome driven system guided by patients 'needs. Hence there is a crying need to bring about a paradigm shift in quality of health care delivery. The authorities need to step forward to get involved in quality. Currently, the quality has been addressed more in medical field than in the allied fields such as dentistry and nursing and also more in the developing country context.

Quality management in health care is a wide term. Initially it was perceived as directing the healthcare personnel to what to do. However, its current interpretation is to manage the process of care. It refers to observing the organizational functions as an interaction of procedures and processes that can be addressed individually and collectively.

### **2.2.1 Quality Management System in medical image**

A Quality Management system (QMS) is an important tool with the objective of continuous quality improvement to support the operation of medical imaging facility. Quality management system contains objective and polices of the facilities; documented procedures; written work instructions; monitoring, recording and auditing of the system.

A good quality management system is important to patient protection and efficient running of a medical imaging facility, providing quality clinical images. Quality management system contain all aspects of medical imaging technology for example room and work flow design, equipment selection and purchase, installation, acceptance test, commissioning test , quality control test, equipment maintenance and the disposal of equipment at the end of its useful life



time. There is a need to benchmark the level of quality management systems to provide evidence-based records aimed at improving protection and safety and ensuring quality imaging. Important principles that medical physicist, who is the one responsible for overall system quality must understand all of the essential elements of a quality management system and have the ability to design the structure of such systems. The key to quality management is a good understanding of the basics, including the concepts of quality assurance, quality control, and continuous quality improvement.

Quality assurance is a management tool which, through the development of policies and the establishment of review procedures, aims to ensure that every examination is necessary and appropriate to the medical problem. It includes patient dose evaluation, quality control of the system, documented policies, training and continuing education of staff, clinical audit and procedures for remedial actions.

Quality control on the other hand is the technical part of quality management system that deals with the instrumentation. It contains the techniques used in monitoring and maintenance of the system elements that can affect the quality within the service program.

Quality management comprises activities and functions undertaken by management in the determination of quality policy and its successful implementation through ways including quality assurance and quality control.

### **2.3 Measuring quality of services in the healthcare industry**

The position taken in this research is based upon the opinion that quality – in relation to healthcare – is a multifactorial and multi-dimensional concept that has been described in different ways (Lohr & Schroeder, 1990). In addition, it has been argued that measuring quality in hospitals should always focus on implementing the suitable (fit for purpose) management systems to ensure the full remit of employees through the creation of participation opportunities, in addition to contributing and developing conditions for joint commitment. Fundamentally, the tactic demands everyone around or within the health sector concentrate on the goal of making continuous improvements aimed at quality enhancement (Qureshi et al., 2013). Such efforts should be capable of delivering quality of care that attempts to attain the satisfaction of patient groups. Quality measurement in hospitals should be an essential prerequisite to improving service quality and achieving efficient resource utilisation (both tangible and intangible resources) within the healthcare industry (Al-Borie & Sheikh Damanhour, 2013; Alanazi et al., 2017). To control and manage service quality in

general hospitals, managers tend to utilise philosophies from business literature to fulfil their needs.

#### **2.4 Requirements for successful implementation of QMS in hospitals**

Beyond the struggle to agree on one concept of QMS, managers of general hospitals are expected to look for opportunities to adopt QMS in their organisations. Policy development is acknowledged as a fundamental step to ensure that QMS is implemented in general hospitals successfully (Chan et al., 2018). According to Cookson et al. (2018), healthcare organisations are associated with introducing the concept of equity as both terms are important key issues to be considered when policy agendas are set (Goetz et al., 2015). The connection between quality and equity is explained by Doran et al. (2008), who argue that hospitals focus on quality as a way to improve safety and enhance cost effectiveness, while improving equity aims to reduce the gap in performance between healthcare providers. Cookson et al. (2018) agreed that changes in the socioeconomic environment and the determination to provide equal and quality services have driven healthcare organisations to focus their policies on developing equity and quality. However, at the same time, healthcare organisations should avoid claiming that quality and equity are practised, because until now hospitals managers have struggled to overcome the challenges related to the nature of the population that their organisations aim to serve. This is because quality targets tend to be more difficult to achieve for socially disadvantaged populations.

It was noticeable that the official report provided by the Institute of Medicine announced that the goal of the 21st century's new health system is to cross the chasm towards a different understanding of the approach to serving the patient, and a new management style that best serves the purposes of the general hospital. Reducing adverse errors, optimising efficiency, and improving patient satisfaction is especially important to provide quality healthcare services. But more important is to introduce new management and a suitable culture into the healthcare organisation to establish quality of care as a culture in which patient safety is at the heart of the practice (Bell et al., 2016). However, the critical element is what is the style of management that could be chosen to serve this purpose? An answer to the above question is suggested by Xie and Carayon (2015), who argue that management in healthcare organisations found themselves forced to change the way in which their organisations are managed due to changes in the global environment, where more technology has been

introduced into hospitals which led to a need for changes in the style and mentality of management teams.

## **2.5 Benefit of quality management implementation in health care**

A Quality Management System, or QMS, is essential for improving your business's operations and enabling it to meet the requirements of customers. Many types of quality management systems are built around ISO 9000, a framework requiring all business processes to be documented and for people to follow these closely.

Once your organization is ISO certified, implementing Quality Management system (QMS) enables you to evaluate all processes to improve efficiency and reduce waste.

When you have QMS in place, you can realize important benefits such as improvements in:

**Organizational Effectiveness:** A QMS helps establish important operational goals while providing a means to measure and review how well your organization reaches these goals.

**Customer Satisfaction:** A business must satisfy its customers to survive; incorporating customer feedback into a QMS allows you to make customer satisfaction improvements.

**Compliance:** Incorporating compliance into documentation, measurement and reporting, and internal auditing systems will eliminate some challenges of meeting key standards and regulations.

**Organizational Culture:** A QMS establishes, communicates, and aligns operational activities with organizational goals and priorities, so all employees are aware of expectations.

**Documentation:** A QMS defines how critical processes and objectives are documented, so important knowledge is available throughout the organization.

## **2.6 Factor Influencing the QMS implementation**

There are six important factors identified: the organization culture, design, quality leadership, physician involvement, quality structure and technical competence. Organization culture, mentioned as the bureaucracy type, cultural type, degree of employee empowerment, and the design factors mentioned as the strategic approach, the size and ownership, customer focused, and the paradigm in solving problems are reported and identified as the critical factors in QMS implementation.

Another reason for the inconsistency is related to outcome measures. Low scores in the earlier stage do not imply failure or success of QMS implementation, but indicate different rates or time consumed in the QMS implementation process. In conclusion, hospitals with more complex structure and greater size face more pressure for quality improvement and need more support, but at the same time they require more effort to introduce the new system

due to structural complexity. While less complex hospitals face less pressure for quality improvement and need less support, they experience correspondingly fewer challenges in introducing QMS.

While top management commitment always is considered as the first requirement for implementing QMS, more findings supported the need to diffuse the quality leadership. This might be related to the fact that many health care organizations possess a more diffuse leadership structure due to the presence of an organized body of professionals who are not employees and a broader set of stakeholder accountability. Another factor was that any QMS implementation process takes several years to yield significant effects on quality improvement, while on the other hand executive turnover is unavoidable. Therefore, putting total responsibility for quality leadership on the top management will not guarantee the success of QMS implementation.

Physician involvement is considered as an important strategy for successful QMS implementation. In a healthcare organization physicians have the dominant power, and their subculture influences the organization culture and decision-making process. In the case of quality improvement that is to be implemented organization wide (especially in large, complex hospitals), support from hospital management and all organization subcultures, especially the physicians, is indispensable. On the one hand, success stories of “local heroes” were found to work only in limited quality actions, and did not diffuse to other activities or departments. On the other hand, strong management leadership without physician support only worked in the administrative and management area, but not in the clinical service area.

## **Chapter Three**

### **3. Methodology**

#### **3.1 Introduction**

This chapter outlines the methodology on how data and information relevant to the research was gathered and analysed in order to achieve the objectives of the study. Research methodology present brief explanation on how the study conducted basically it includes; the study design and approach, sample size, sampling techniques, data collection methods, data analysis,.

#### **3.2 Description of the study area**

The study was conducted in St. Paul hospital millennium medical college (SPHMMC), which is located at Gulelle sub city Addis Ababa, Ethiopia. Their activities focus on to provide comprehensive healthcare services, teach high quality medical education and meet the needs of the communities it serves through its advanced and affordable healthcare system.

#### **3.3 Research design**

The objective of this study was to evaluate involved in the implementation of QMS the study was descriptive type of research, since it allows the collection of data through questionnaires and interview on the bases of sample, which helps to find out the view of the population. The researcher was used a mixed methods approach both quantitative and qualitative in order to achieve the main objective of this research. According to Mark et al. (2009:101) mixing qualitative and quantitative approaches gives the potential to cover each method's weaknesses with strengths from the other method. It helps to collect data that could not be obtained by adopting a single method. Therefore, survey with questionnaires and semi-structured interview was employ so as to evaluate the QMS implementation practices and challenges in respect to quality improvement. The semi structured interview was used to gather some information about the views of the quality managers and head of department in the hospital.

#### **3.4 Source of population**

The target population for this study was St. Paul hospital millennium medical college staffs which is found in Addis Ababa.

### **3.5 Sampling design**

In order to select the appropriate representative samples of the total population and to make the research findings more relevant and accurate, the sample design was well structured.

### **3.6 Sampling techniques and sample size**

The study was use non probability and purposive sampling technique. By this technique representative laboratory staffs, Quality department teams, nurse, case team coordinator, physician, and other department staffs were select as respondents in the research while in-depth interview was with other management department heads who have been working closely with quality in order to gain relevant data about present status of Quality management system. As per the total no of employees were working mainly in the area of quality process the researcher was employed purposive convenient sampling method.

### **3.7 Source of Data**

To attain the aim of the study, to acquire data on the extent of quality management system implementation in St. Paul hospital millennium medical college, the researcher was use both primary and secondary data sources. Both primary and secondary data sources used to answer research questions. Primary source data was mainly obtained through self-administering structured questionnaires, survey and personal interview. Secondary source data include internally generated documents by the organization like organizational profile, quality manuals, policies, process charts and annual reports including customer compliant handling. The secondary data obtained from review of literatures, recorded documents, published and unpublished, including relevant books, reports, and journals and relevant materials were used for the study.

### **3.8 Instrument of data collection and Questionnaire survey**

Both questionnaires and semi-structured interview data collection instruments were used for data collection.

The questionnaire was used as the primary tool for collecting data. The questionnaire helped the researcher to gather the required data enabling the respondents to complete anonymously. In addition to this questionnaire was inexpensive to administer to many people, easy to compare and analyze and the researcher could get lots of data. Accordingly the questionnaire was distributed for 167 sample respondents and all of them were returned.

The research has basic components. The one priority of the study was to assess the implementation of all the principles of QMS in the organization. Hence, the semi-structured questionnaire was having concepts that explained whether every principle had effectively

implemented or not. The semi-structured questionnaire was organized with sections. Section one, deals with the subjects of demographic factors like age, experience in the organization and position occupied in the organization. Section two related to hospital strategy on case area. Section three focused on the QMS implementation status. The rest section four was related to QMS seven subsections for the seven variables namely customer focus, management commitment, engagement of people, process approach, continuous improvement, Evidence based decision making and supplier relationship. Detailed questions included for every variable. The interview questions mainly focused on management and head of department knowhow about quality, principles, practices and procedures related to quality improvement, benefits of practicing and challenges of practicing QMS principles while its initial stage of implementation.

### **3.9 Data collection procedure**

In this study, quantitative and qualitative, primary and secondary data was collected from selected participants and sources. The data collection was mainly focused on the objective of the study.

The quantitative data on implementation of quality management system was collected by using self-administered, structured questionnaire from selected hospital staff member.

The qualitative data was collected from head of departments and who have management position in the hospitals by using unstructured and structured interview and a guide questionnaire prepared in English.

#### **3.9.1 Interview**

The qualitative aspect of the study was undertaken with the aim of investigating the perceptions of heads of departments regarding to their understanding of the quality management system and its implementation in St. Paul hospital. Data were collected using seven semi-structured interviews in the St. Paul hospital with heads of the following departments: Assistant Director of Medical Services, Head of Quality Department, Head of Management Training and Research and Education Department, Head of laboratory Department, Head of maternity Department, Head of surgery department, Head of Patient Safety and Patient Affairs Departments. The researcher chooses it to obtain full range and depth of information. Besides, the researcher could get the opportunity to develop relationship with clients and could be flexible with them as well. More over the researcher

fully understood employee impressions or experiences, or learned more about their answers to questionnaires.

### **3.9.2 Questionnaire**

The questionnaire was used as the primary tool for collecting data. Using the questionnaire can help the researcher to collect data faster and cheaper than any other instrument. The Questionnaire addressed the level of awareness on the existing quality management system implementation as well as the strategy of hospital regarding to quality. Accordingly the questionnaire was distributed for 167 sample respondents and all of them were returned.

### **3.10 Data analysis procedure**

The collected data using this questionnaire was analysed and presented with tables and percentages using SPSS 26 software. Based on the results of the analysis, using the mean and standard deviation of the sample further discussions and conclusions was made. The discussions and conclusions were further supported by analysis of interview responses, review of the organization documents and Literatures. And it was analysed using Descriptive statistics such as Frequency distribution and cross tabulation of variables was computed to describe the major variables of the study. Qualitative data analysis was summarized and fully discussed guided by content analysis.

### **3.11 Validity and Reliability of Data**

Validity is the extent to which the instrument measures what it appears to measure assessment questionnaires. It is important to know whether the questionnaires were properly constructed with logical sequence of questions to ensure logical flow of information to be understood by respondents. The internal consistency of this study was checked by Cronbach's alpha. The data obtained were analyzed by using SPSS 26 to say the reliability and scales of tools and patterns under the questionnaire 30 items and it indicates an alpha value greater than 0.7 so the data is reliable.

### **3.12 Ethical Consideration**

Ethical approval was requested and obtained from the hospital ethical clearance committee. The permission of the various heads of the departments was also sought as the data collection was done and all the research data endured confidential throughout and will remain after the completion of the study, too.



## **Chapter Four**

### **4. Data Presentation, Analysis and Interpretation**

#### **4.1 Introduction**

This chapter deals with analysis and interpretation of the data obtained from the case organization. It has four major sections. In the first section of the chapter demographic characteristics of respondents are presented, the second section strategy of hospitals are presented, the third section about 11 standard QMS activities according to EHSTG standard are presented and the fourth section of the chapter according to QMS principle are presented through questionnaire and analysed by the SPSS 26 data processing software.

#### **4.2 Background of the organization**

St. Paul's Hospital was established with the intent to help poor people who could not afford medical expenses. The hospital was first administered by the Ministry of Health, but the management of the hospital was later transferred to the Haile Selassie I Foundation. The foundation assigned high profile people for St. Paul Hospital Board of Directors. In 1968/1969, new hospital building was constructed in the Gulele area, its present site. There focus is to provide quality and sustainable healthcare in a culture, which encourages teamwork, education, the use of advanced technologies, health promotion and community involvement. St. Paul's offers a variety of programs and services that meet many patient care needs, with leading national programs in the area of integrated medical teaching school, nephrology, neonatal and maternal health, trauma and rehabilitation, forensic medicine, etc. At St. Paul's Hospital Millennium Medical College, providing quality, patient-centered care is at the core of everything they do. They care for more than 418,000 patients each year in addition to clients coming from Addis Ababa, which makes us a true regional referral center. The core values of St. Paul's Hospital Millennium Medical College health system include caring, excellence and stewardship.

Mission: to provide comprehensive healthcare services, teach high quality medical education and meet the needs of the communities we serve through their advanced and affordable healthcare system.

Vision: the vision of SPHMMC is to set the new century for health in Ethiopia by striving to become a center of excellence in healthcare, medical education and research.

Values: patient-community-students.

#### **Compliant Handling**

In the current system clients complained about several issues. The current complaint submission box is attached in the annex section (see Annex A). The issues clients, described include health workers disrespecting clients and not providing care with dignity, the toilets of some Health institutions were unclean and there was water shortage and inconvenient space for waiting, physicians not appearing on time for work and caused congestions, shortage of beds and long appointments and waits for services at health institutions, disrupted services in pharmacy and laboratory units of the health institutions.

The organization or compliant handling committee collects the complaint from compliant submission box or literally from the client face to face.

### 4.3 Demographic Characteristics of the respondent

Analysing the demographic characteristics of the respondent helps to maintain the quality of the data obtained and to determine the knowledge of the respondent about the topic of the study through their work experience, educational background and their work position.

**Table 4.1 Frequency of Gender, Years of experience, Work position in your organization and Educational Background of respondent**

Socio-demographic variables	Groups	Frequency	%
Gender	Male	74	44.3
	Female	93	55.7
Work position in your organization	Physician	13	7.8
	Nurse	46	27.5
	Laboratory technologist	34	20.4
	Pharmacist	15	9.0
	Midwifery	21	12.6
	Surgery resident	12	7.2
	Quality team	12	7.2
Work experience	Case team coordinator	14	8.4
	< 2 years	54	32.3
	3-5 Years	67	40.1
Educational background	>5 years	46	27.5
	Diploma	7	4.2
	Degree	120	71.9
	MSC/MA	40	24.0

Source: Data collected through Questionnaire, 2022

Table 4.1 presents the frequency distribution of demographic characteristics of the respondent who are professionals in the organization used as a case for this study. One hundred sixty

seven professionals who work in the case of hospital participated in this study as respondents with 100% response rate.

From the respondents 93(55.7%) were female whereas the remaining 73(44.3%) were male. The majority of the respondents 46(27.5%) were nurses, followed by 34(20.4%) Laboratory, 21(12.6%) were Midwives, 15(9.0%) were Pharmacist, 14(8.4%) were case team coordinator, 13(7.8%) were Physician, 12(7.2%) were quality teams and the rest 12(7.2%) were surgery resident.

Regarding the experience, 54(32.3%) were <2 years, 67(40.1%) were 3-5 years, 46(27.5%) were >5 years and

The educational status, 120(71.9%) were degree holder, whereas 40(24.0%) were master's level and the remaining 7(4.2 %) were diploma level. This shows that, respondents are addressed from different educational background most of them are bachelor degree holder.

#### 4.4 Basic information regarding to hospital strategy

Analysing the hospital strategy of the case helps to maintain the quality of the data obtained and to determine the objectives and goals of the case hospital.

**Table 4.2 Response of professionals regarding to hospital strategy towards Quality Management system regarding to hospital strategy**

	Activities	Not Available		Available but not communicated		Available and communicated		Don't know	
		frequency	%	frequency	%	frequency	%	frequency	%
1	Mission statement regarding Quality care delivery	1	0.6	51	30.5	115	68.9	0	0
2	Quality plan of the hospital	0	0	45	26.9	117	70.1	5	3.0
3	Departmental quality plan	6	3.6	39	23.4	122	73.1	0	0
4	Budget for Quality improvement	11	6.6	40	24.0	39	23.4	77	46.1

Source: Data collected through Questionnaire, 2022

115(68.9%) of respondents report that there was available and well communicated mission statement regarding Quality care delivery, 51(30.5%) respondents report that not communicated and the rest were report there is not available.

117(70.1%) of respondents confirm that there was available and well communicated the Quality plan of the hospital, 45(26.9%) respondent report there was available but not

communicated and the rest 5(3.0%) respondent report they don't know about the quality plan of the hospital.

122(73.1%) of respondents report that there was available and well communicated the departmental quality plan, 39(23.4%) respondent reports there was the statement but not communicated throughout the hospital and the rest 6(3.6%) respondent report not available.

77(46.1%) of respondents report they don't know about the budget for quality improvement, 39(23.4%) respondents report that there was available and communicated through hospital, 40(24.0%) respondents report there was not communicated and the rest of 11(6.6%) respondents report that there was not available the budget for quality improvement.

#### **4.5 Basic Information according to 11 EHSTG standards of quality management system activities**

**Table4.3 Response of health professionals regarding to standard quality management activities in hospitals**

No	Activities	Response	Frequency	Percent (%)
1	The hospital has Quality Improvement Unit or case team	Yes	166	99.4
		No	1	.6
		Total	167	100.0
2	Incident reporting and analysis system in each case team	Yes	130	77.8
		No	37	22.2
		Total	167	100.0
3	The hospital continuously and systematically reviews and improves all activities that directly affect patients and staff	Yes	108	64.7
		No	59	35.3
		Total	167	100.0
4	Clinical audit in each case team	Yes	100	59.9
		No	67	40.1
		Total	167	100.0
5	Monitoring clinical outcome in each case team	Yes	128	76.6
		No	39	23.4
		Total	167	100.0
6	Patient right and responsibility posted in service areas	Yes	160	95.8
		No	7	4.2
		Total	167	100.0
7	Patient satisfaction survey conducted(in/out patient)	Yes	130	77.8
		No	37	22.2

		Total	167	100.0
8	Complaints received analysed and discussed with the staff	Yes	146	87.4
		No	21	12.6
		Total	167	100.0
9	Benchmarking and experience sharing with other hospitals	Yes	70	41.9
		No	97	58.1
		Total	167	100.0
10	The hospital implements a strategy to provide patient focused care which incorporates, compassion, respect and dignity for patients	Yes	136	81.4
		No	31	18.6
		Total	167	100.0
11	The hospital developed quality improvement strategy and operation plan in each case team.	Yes	146	87.4
		No	21	12.6
		Total	167	100.0

Source: Data collected through Questionnaire, 2022

Medical staffs were asked about the implementation of quality management system activities in their hospital based on 11 operational standards included in quality management chapter 19 of EHSTG. As shown the above Table 4.3, 166(99.4%) respondents have positive response on the activity of their hospital has quality improvement unit or case team, 130(77.8%) respondents have positive response on the activity of incident reporting and analysis system in each case team whereas 37(22.2%) respondent have negative response on it. 108(64.7%) respondent have positive response whereas 59(35.3%) respondents have negative response on the activity of the hospital continuously and systematically reviews and improves all activities that directly affect patients and staff, 100(59.9) respondents have positive response whereas 67(40.1%) respondents have negative response on the activity of clinical audit in each case team, 128(76.6%) respondents have positive response whereas 39(23.4%) respondents have negative response on the activities of monitoring clinical outcome in each case team, 160(95.8%) respondent report positive response whereas 7(4.2%) respondents report negative response on the activity of patient right and responsibility posted in service areas, 130(77.8%) respondents report positive response whereas 37(22.2%) respondents report negative response on the activity of patient satisfaction survey conducted (in/out patient), 146(87.4%) respondents have positive response whereas 21(12.6%) respondents have negative response on the activity of complaints received analysed and discussed with staff., 70(41.9%) respondents report positive response whereas 97(58.1%) respondents reports have negative response on the activity of benchmarking and experience

sharing with other hospitals, 136(81.4%) respondents confirm positive response whereas 31(18.6%) respondents confirm negative response on the activity of the hospital implements a strategy to provide patient focused care which incorporates, compassion, respect and dignity for patients, 146(87.4%) respondents have positive response whereas 21(12.6%) respondents have negative response on the activities of the hospital developed quality improvement strategy and operation plan in each case team.

#### 4.6 Descriptive Analysis of variables on Quality management system principle

**Table 4.4 Analysis of Customer Focus variables**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

item	Questions	Frequency					Percent (%)					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	Your organization know that who is our customer	4	3	18	98	44	2.4	1.8	10.8	58.7	26.3	4.0479	.81261
2	Your organization emphasizes on assessing current customers' needs and expectations.	3	20	31	88	25	1.8	12.0	18.6	52.7	15.0	3.6707	.93424
3	Patient satisfaction is consistently monitored and changes are made in response to the data collected.	1	27	21	77	26	9.6	16.2	12.6	46.1	15.6	3.4192	1.20905
4	Patient satisfaction data is regularly reported to hospital top management.	4	24	51	65	23	2.4	14.4	30.5	38.9	13.8	3.4731	.98062
5	Customer complaints are frequently resolved by employee of the organization	2	17	37	64	29	12.0	10.2	22.2	38.3	17.4	3.3892	1.23137

Source: Data collected through Questionnaire, 2022

As it is shown the above table 4.4 among all the respondent 98(58.7%) respondent have agreed, 44(26.3%) respondent have strongly agreed, 18(10.8%) respondent reported by saying neutral, 4(2.4%) and 3(1.8%) respondents have disagreed for the item 1 which stated that the organization know that who is their patient and moreover, the average mean value 4.04 and standard deviation 0.81 shows the organization knows their patient.

88(52.7%) respondent have agreed that the organization emphasizes on assessing current customers' needs and expectations, 31(18.6%) respondent reported by saying neutral, 25(15.0%) respondent have strongly agreed, 20(12.0%) respondent have disagreed and the rest 3(1.8%) respondent have strongly disagreed and moreover the average mean and standard deviation is 3.67 and 0.93 respectively. This finding shows that the hospital has emphasize on assessing current patients' needs and expectations.

Participant responds for the question no 3 the patient satisfaction consistently monitored and changes are made in response to the data collected, 77(46.1%) respondent have agreed, 26(15.65) respondent have strongly agreed, 27(16.2%) respondent have disagreed, 21(12.6%) respondent have said neutral, 16(9.6%) respondent have strongly disagreed for the third statement and moreover the mean value is 3.41 and the standard deviation is 1.20.

65(38.9%) respondent have agreed that Patient satisfaction data is regularly reported to hospital top management, 51(30.5%) respondent said neutral for this question, 24(14.4%) respondent have disagreed, 23(13.8%) respondent have strongly agreed, 4(2.4%) respondent have said strongly disagreed the mean and standard deviation value is 3.47 and 0.98 respectively.

The responses shown in the table 4.4 item 5 indicates 64(38.3%) respondents have agreed, 37(22.2%) respondent have said neutral, 29(17.4%) respondent have strongly agreed, 20(12.0%) respondents have strongly disagreed, 17(10.2%) respondent have said disagreed for the question of Customer complaints are frequently resolved by employee of the organization and moreover the mean and the standard deviation value is 3.38 and 1.23 respectively. This shows that patient complaints are frequently resolved by comparing the responses.

**Table 4.5 Analysis of leadership variable**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

no	Questions	Frequency					Percent (%)					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	Hospital top management sets specific objectives for quality improvement.	7	11	35	77	37	4.2	6.6	21.0	46.1	22.2	3.7545	1.00880
2	Hospital top management reviews quality improvement activities in meetings.	-	15	41	74	37	-	9.0	24.6	44.3	22.2	3.7964	.88861

3	Hospital top management supports the long-term quality improvement process.	-	27	42	61	37	-	16.2	25.1	36.5	22.2	3.6467	1.00047
4	Top management is a primary driving force behind quality improvement effort	4	7	36	83	37	2.4	4.2	21.6	49.7	22.2	3.8503	.89597
5	Senior executives involve on activities that enhance customer satisfaction by obtaining information on needs and suggestions for quality improvement directly from customers	3	16	86	32	30	1.8	9.6	51.5	19.2	18.0	3.4192	.95267

Source: Data collected through Questionnaire, 2022

From the above table 77(46.1%) of the respondents agreed that Hospital top management sets specific objectives for quality improvement. Followed by 37(22.2%) responding to strongly agreed in this situation, 35(21.0%) respondents response to neutral, 11(6.6%) and 7(4.2%) respondents response disagree and strongly disagree respectively and more over the mean value is 3.75 and the standard deviation value is 1.008. this finding shows most of participant believe that hospital top management sets specific objectives for quality improvement.

For the question that Hospital top management reviews quality improvement activities in meetings. 44.3% respond to be agreed, 24.6% neutral, may be their job type may prevent them from knowing about the phenomena or maybe they have their own reason not to pick one, 22.2% strongly agree, 9.0% disagree. With the mean and standard deviation value is 3.79 and 0.88 respectively.

For the above table 4.5, 36.5% of the respondents agree that Hospital top management supports the long-term quality improvement process, 25.1% are neutral, 22.2% strongly agree, 16.2% disagree hence the results indicate that top management supports the long term quality improvement process.

49.7% and 22.2% of respondents agreed and strongly agreed that Top management is a primary driving force behind quality improvement effort, 21.6% are neutral, 4.2% and 2.4% of respondents disagreed and strongly disagreed respectively.

The responses of the participants shown in item 5 of table 4.5 indicates 32(19.2%) and 30(18.0%) have agree and strongly agree respectively, 86(51.5%) have neutral responses and



16(9.6%) and 3(1.8%) have disagree and strongly disagree responses. The finding indicates that most of participate are neutral this is may be their job type may prevent them from knowing about the phenomena or maybe they have their own reason not to pick one.

**Table 4.6 Analysis of Engagement of people variable**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

n o	Questions	Frequency					Percent					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	Every employee's thought has been used as an input to make any quality decision.	4	22	43	68	30	2.4	13.2	25.7	40.7	18.0	3.5868	1.00748
2	Cross-departmental teams are utilized to evaluate hospital quality improvement or quality of care	12	16	44	78	17	7.2	9.6	26.3	46.7	10.2	3.4311	1.0383
3	Every employee are participate on the process of quality improvement	7	24	77	42	17	4.2	14.4	46.1	25.1	10.2	3.2275	0.96115
4	The organization has an effective system for employees to make suggestions to management on how to improve quality	18	22	83	40	4	10.8	13.2	49.7	24.0	2.4	2.9401	0.94869
5	The organization's employees are given training in statistical and quantitative methods that support quality improvement	28	59	56	10	14	16.8	35.3	33.5	6.0	8.4	2.5389	1.10174

Source: Data collected through Questionnaire, 2022

From the above table 4.6 we can see that 68(40.7%) of the respondents agreed that every employee's thought have been used as an input to make any quality decision, followed by 43(25.7%) neutral, 30(18.0%) strongly agree, 22(13.2%) disagree and 4(2.4%) strongly disagree. These results imply that every employee thought have been used as an input to make any quality related decisions.

The responses of the participants shown in item 2 of table 4.6 indicates 78(46.7%) and 17(10.2%) have agree and strongly agree respectively, 44(26.3%) have neutral responses and 16(9.6%) and 12(7.2%) have disagree and strongly disagree responses. These results imply

that Cross-departmental teams are utilized to evaluate hospital quality improvement or quality of care

For the question that every employee are participate on the process of quality improvement 77(46.1%) are neutral, 42(25.1%) and 17(10.2%) respondent agreed and strongly agreed respectively, 24(14.4%) and 7(4.2%) responds strongly disagreed and disagreed respectively. This finding show that the participants are not sure every employees are participate on the process of quality improvement.

83(49.7%) respondent have said neutral, 40(24.0%) respondents have agreed, 22(13.2%) respondents have disagreed, 18(10.8%) respondents have strongly disagreed and 4(2.4%) respondents have strongly agreed for the question which state on the above table 4.6 item 4 The organization has an effective system for employees to make suggestions to management on how to improve quality. This shows most of participant choose the neutral. This is may be their job type may prevent them from knowing about the phenomena.

Table 4.6 in item 5 shows that 10(6.0%) and 14(8.4%) of the respondents were agreed and strongly agreed respectively on the question asking the organization’s employees given education and training in statistical and other qualitative methods that support quality improvement, 56(33.5%) have neutral and 59(35.3%) and 28(16.8%) were disagreed and strongly disagreed respectively. The mean and std. deviation of the responses were 2.53 and 1.10 respectively. The result indicates that about the majority of the responses were on neutral because of this the organization need some works on this phenomena to improve quality and implement QMS quickly.

**Table 4.7 Analysis of process approach variable**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

item	Questions	Frequency					Percent					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	The organization identifies the key business processes by prioritizing on the basis of the value chain, customer needs and strategic significance, and using process models and definitions	9	14	78	56	10	5.4	8.4	46.7	33.5	6.0	3.2635	0.89982

2	The organization uses innovation and creativity to improve processes by adopting self-managed teams, business process improvement and idea schemes.	4	19	101	40	3	2.4	11.4	60.5	24.0	1.8	3.1138	.71489
3	The organization reviews processes and sets improvement targets by empowering process owners to set targets and collect data from internal and external customers	7	12	75	70	3	4.2	7.2	44.9	41.9	1.8	3.2994	.80297
4	Statistical control charts are used to monitor processes throughout the hospital.	-	18	69	71	9	-	10.8	41.3	42.5	5.4	3.4251	.75576
5	The organization change processes and evaluate the benefits through process improvement or re-engineering teams, project management and involving customers, and suppliers	4	13	47	80	23	2.4	7.8	28.1	47.9	13.8	3.6287	.90175

Source: Data collected through Questionnaire, 2022

78(46.7%) respondent have said neutral, 56(33.5%) respondents have agreed, 14(8.4%) respondents have disagreed, 10(6.0%) respondents have strongly agreed and 9(5.4%) respondents have strongly disagreed for the question which state on the above table 4.7 item 1 The organization identifies the key business processes by prioritizing on the basis of the value chain, customer needs and strategic significance, and using process models and definitions. This shows most of participant choose the neutral. This is may be their job type may prevent them from knowing about the phenomena.

For the question that the organization uses innovation and creativity to improve processes by adopting self-managed teams, business process improvement and idea schemes. 101(60.5%) are neutral, 40(24.0%) and 3(1.8%) respondent agreed and strongly agreed respectively, 19(11.4%) and 4(2.4%) responds disagreed and strongly disagreed respectively. The mean

value is 3.11 and the standard deviation value is 0.71. This finding shows that maybe the participants have their own reason not to pick one.

From the above table 4.7, item 3 the organization reviews processes and sets improvement targets by empowering process owners to set targets and collect data from internal and external customers the participants respond 75(44.9%) respondents are neutral, 70(41.9%) respondents have agreed, 12(7.2%) respondents have disagreed, 7(4.2%) respondents have strongly disagreed, 3(1.8%) respondents have strongly agreed.

For the question from the above table 4.7 responses 71(42.5%) respondents have agreed, 69(41.3%) respondents have neutral, 18(10.8%) respondents have disagreed, 9(5.4%) respondents have strongly agreed for the item 4 question which is Statistical control charts are used to monitor processes throughout the hospital. The mean and standard deviation value is 3.42 and 0.75 respectively. This shows that most of participant agreed that statistical control charts are used to monitor processes throughout the hospital.

80(47.9%) and 23(13.8%) respondents have agreed and strongly agreed respectively, 47(28.1%) respondents have neutral, 13(7.8%) and 4(2.4%) respondents have disagreed and strongly disagreed respectively and more over the mean value is 3.62 and the standard deviation is 0.9. this finding shows that the organization change processes and evaluate the benefits through process improvement or re-engineering teams, project management and involving customers, and suppliers.

**Table 4.8 Analysis of continuous improvement variable**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

n o	Questions	Frequency					Percent %					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	Everyone in the organization is aware of the need to improve continuously and show their efforts for improvement	14	22	29	89	13	8.4	13.2	17.4	53.3	7.8	3.3892	1.08022
2	The causes of all the possible faults are identified, informed and employees are well trained on common types of faults and how to	18	24	81	41	3	10.8	14.4	48.5	24.6	1.8	2.9222	0.94419

	manage problematic situations when happened												
3	Continuous improvement tools (brainstorming, check sheet and other statistical process control) are applied on regular basis.	13	29	56	59	10	7.8	17.4	33.5	35.5	6.0	3.1437	1.03129

Source: Data collected through Questionnaire, 2022

As it is shown table 4.8 the participant respond the question of everyone in the organization is aware of the need to improve continuously and show their efforts for improvement, 89(53.3%) respondents have agreed, 29(17.3%) respondents have neutral, 22(13.2%) respondents have disagreed, 14(8.4%) respondents have strongly disagreed and 13(7.8%) respondents have strongly agreed. The mean is 3.38 and the standard deviation is 1.08.

For the question that the causes of all the possible faults are identified, informed and employees are well trained on common types of faults and how to manage problematic situations when happened 81(48.5%) are neutral, 41(24.6%) and 3(1.8%) respondent agreed and strongly agreed respectively, 24(14.4%) and 18(10.8%) responds disagreed and strongly disagreed respectively. The mean value is 2.92 and the standard deviation value is 0.94. This finding shows that maybe the participants have their own reason not to pick one.

59(35.5%) respondents have agreed, 56(33.5%) respondents have neutral, 29(17.4%) respondents have disagreed, 13(7.8%) respondents have strongly disagreed and 10(6.0%) respondents have strongly agreed. The mean and standard deviation value is 3.14 and 1.03 respectively for the statement of Continuous improvement tools (brainstorming, check sheet and other statistical process control) are applied on regular basis.

**Table 4.9 Analysis of evidence based decision making variable**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

Item	Questions	Frequency					Percent (%)					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	The organization encourages statistical measurements and analysis throughout the	8	18	63	74	4	4.8	10.8	37.7	44.3	2.4	3.2874	0.87193

	organization												
2	Every activity in the organization is recorded by employees	10	12	47	77	21	6.0	7.2	28.1	46.1	12.6	3.5210	1.00504
3	Top management seeks summarized reports of the facts recorded on a daily basis to make quality related decisions	4	8	93	48	14	2.4	4.8	55.7	28.7	8.4	3.3593	.80076
4	The organization provides planned targets for every employees and subsequent decisions are made based on deviations of actual and targeted outcomes	10	21	63	66	7	6.0	12.6	37.7	39.5	4.2	3.2335	.93748

Source: Data collected through Questionnaire, 2022

As it is shown table 4.9, item 1 the participant respond the question of The organization encourages statistical measurements and analysis throughout the organization, 74(44.3%) respondents have agreed, 63(37.7%) respondents have neutral, 18(10.8%) respondents have disagreed, 8(4.8%) respondents have strongly disagreed and 4(2.4%) respondents have strongly agreed. The mean is 3.28 and the standard deviation is 0.87. This finding shows that there is a good run of their encouragement. The neutral respondent may be having their reason not to pick one.

77(46.1%) and 21(12.6%) respondents have agreed and strongly agreed respectively, 47(28.1%) respondents have neutral, 12(7.2%) and 10(6.0%) respondents have disagreed and strongly disagreed respectively for the question which is state the above table 4.9 item 2 Every activity in the organization is recorded by employees. The mean value is 3.52 and the standard deviation value is 1.005.

From the question table 4.9, item 3 Top management seeks summarized reports of the facts recorded on a daily basis to make quality related decisions, 93(55.7%) respondents are neutral, 48(28.7%) and 14(8.4%) respondents have agreed and strongly agreed respectively, 8(4.8%) and 4(2.4%) respondents have disagreed and strongly disagreed respectively. The mean value is 3.35 and the standard deviation value is 0.8. This shows there is a gap in the

organization that can't say confidently that the top management seeks summarized reports of facts recorded on a daily basis to make quality related decision.

Table 4.9 in item 4 shows that 66(39.5%) and 7(4.2%) of the respondents were agreed and strongly agreed respectively on the question asking the organization provides planned targets for every employees and subsequent decisions are made based on deviations of actual and targeted outcomes 63(37.7%) respondents have neutral and 21(12.6%) and 10(6.0%) were disagreed and strongly disagreed respectively. The mean and std. deviation of the responses were 3.23 and 0.93 respectively.

**Table 4.10 Analysis of supplier relationship management variable**

Response 1=strongly Disagree 2=Disagree 3=Average 4=Agree 5= strongly agree

n o	Questions	Frequency					Percent					Mean	Std.
		1	2	3	4	5	1	2	3	4	5		
1	The organization plans and manages the external partnerships which is in line with its overall policies and strategies, being designed and developed to support the effective operation of its processes	-	13	72	82	-	-	7.8	43.1	49.1	-	3.41 32	.6328 9
2	The organization maintains successful partnerships with its suppliers through good communications and exchange of information.	4	67	87	9	-	2.4	40.1	52.1	5.4	-	3.60 48	.6301 5
3	The organization have closer relationship with its suppliers which helped the organization to get technical support from its suppliers when needed rather than merely exchange of goods	3	59	95	10	-	1.8	35.3	56.9	6.0	-	3.65 27	.6759 9

Source: Data collected through Questionnaire, 2022

From the above table 4.10 item 1, 82(49.1%) of the respondents agreed that the organization plans and manages the external partnerships which is in line with its overall policies and strategies, being designed and developed to support the effective operation of its processes Followed by 72(43.1%) responded to neutral and 13(7.8%) respondents have disagreed in this situation, and more over the mean value is 3.41 and the standard deviation value is 0.63. this finding shows most of participant believe that the organization plans and manages the external partnerships.

Table 4.10 in item 2 shows that 87(52.1%) of the respondents were neutral on the question asking the organization maintains successful partnerships with its suppliers through good communications and exchange of information this is may be their job type may prevent them from knowing about the phenomena. 9(5.4%) respondents have agreed and 67(40.1%) and 4(2.4%) were disagreed and strongly disagreed respectively. The mean and std. deviation of the responses were 3.60 and 0.63 respectively. The result indicates that about the majority of the responses were on neutral because of this the organization need some works on this phenomena to improve quality.

As it is shown the response of participant on table 4.10 item shows that 95(56.9%) respondent were neutral for the question that the organization have closer relationship with its suppliers which helped the organization to get technical support from its suppliers when needed rather than merely exchange of goods, 59(35.3%) and 3(1.8%) of respondent were disagreed and strongly disagreed respectively, 10(6.0%) of respondents were agreed for this situation and more over the mean value is 3.65 and standard deviation is 0.67. this indicate that imply there is a gap in this situation and the organization needed to improve it.

#### 4.7 Overall Mean Values for Each Variable

Table 4.11 overall mean value

<b>Variables</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>
Customer focus	167	1	5	3.6
Leadership	167	2	5	3.68
Engagement of people	167	1	5	3.14
Process approach	167	1	5	3.34
Continuous improvement	167	1	5	3.14
Evidence based decision	167	1	5	1.34
Supplier relationship	167	1	5	3.55
Total Valid N(list wise)167				

Source: Data collected through Questionnaire, 2022



Table 4.6 presented the overall mean value for each variable. When we see the mean values, we can understand the responses of the subject employees of the organization skewed to the upper values between Neutral and agree responses. The fact that a lot of the respondents are neutral is may be their job type may prevent them from knowing about the phenomena or maybe they have their own reason not to pick one. However, if it is due to lack of awareness the company should work on employee awareness.

#### **4.8 Analysis of interview Questions**

##### **Summary of the findings of the semi-structured interview is presented:**

Qualitative analysis of the responses of employees selected for the interview asking about:

How do explain understanding on QMS?

They raise some points about QMS such as; - QMS is used to achieve quality with improved organizational culture and satisfied employees in a way that can help the organization to achieve its vision. They also said “It is in progress, there is good start but needs further action especially in engaging all professionals (staffs).”

What are the major challenges faced by during the implementation of QMS in the SPHMMC?

The major challenges raised by respondent are Almost all of the respondents raised that budget was the critical problem in implementing quality management system in the hospitals. Secondly lack of the top managers or leadership to support and engagement also thirdly mentioned determinant factors was low staff and departmental commitment in participation of QMS and also lack of QMS training. There were the most associated factors in implementation of quality management system in the hospitals.

What is the positive effect and benefit of QMS implementation?

About The benefit of QMS practice listed by all respondents agreed that reduce medical error, increase patients and employees’ satisfaction, improve quality service delivery, competitive advantage and improve customer relations.

How do you explain training of employee on QMS?

In this regard almost all respondent raise there is no sufficient training of employee on quality management system.

## Chapter five

### 5. Summary of finding, conclusion and recommendation

#### 5.1 Summary of finding

The objective of this research has been to evaluate QMS implementation in healthcare service a case of St. Paul hospital. For achievement of the research scientific method has been followed.

The strategy of hospital has been examined for this study to check whether available or not in the organization. The questionnaire in this part containing four activities on the hospital strategy. The overall average mean value is 2.8. It indicates there is a gap on the activity of budget for improvement is not communicated through the hospital. The results of this study on the implementation of quality management system encourage that there is a need to have well established and fully -functioning quality committee, to form awareness in the professionals on the significance of quality management system for the hospitals, and adjust/lay specified budget for quality improvement activities in the hospitals.

In this study the implementation status of quality management system from professional perception based on assessment using EHSTG standard. The hospital had best performance on posting patient right and responsibility in service areas and developed quality improvement strategy and operation plan in each case team. This assessment also revealed that the hospitals had good performance on Monitoring clinical outcome in each case team.

When we look at the responses for every variables based on QMS principle A questionnaire containing 30 items has been prepared for these seven principles and made interview for head of departments to get some information about the understanding of QMS, the benefits of the organization from practices of QMS and the challenges face to implement QMS properly and quickly in the organization. The mean values are Customer focus (3.6), Management commitment (3.68), Engagement of people (3.14), Process approach (3.34), Continuous improvement (3.14), Evidence based decision making (3.34), Supplier relationship (3.55). Thus, the minimum mean is for Engagement of people that is 3.14 and Continuous improvement that is 3.14 and the maximum is for management commitment that is 3.6. From the means, we can understand that the mean values are between subjects who are neutral and who agree with the phenomena.

The variable Customer focus with the overall average mean of 3.6 shows that the responses are skewed towards the agree responses. From this result, one can infer that the organization works hard on its customer's satisfaction. Literatures on QMS system implementation say that focus on satisfying customer is the basic element in QMS. Westcott (2006) in the finding states that customer plays a major role in determining the level quality. The study done by Hackman and Wageman as cited in Abegaz states that getting information about customer is one of the most widely used QM implementation practices to improve the quality performance of the organization (Abegaz,2015).

The variable management commitment mean of 3.68 shows that the responses are skewed towards agree and neutral response. From this result, top managements and senior executives' works hard to bring quality in the hospital and the organization is try to creates good working environment which is suitable for employees to engage in activities that enhance quality system in the organization.

The finding of the study reveals that the mean average of engagement of people and continuous improvement was 3.14 and 3.14 respectively; this implies that which is between the responses for neutral and agrees. This result means most of the respondents choose neutral and agree. The fact that most of the subjects choose to neutral that the organization is continuously improving is may be because, the subjects are working in positions that could not allow to notice continuous improvement in the organization or the subjects may not work for too long to notice whether the organization is continuously improving or not. In addition to that, they are unaware how to notice continuous improvement in the organization. However, having the facts discussed one can infer that the organization is continuously improving from time to time.

The mean average value of both process approach variable and evidence based decision making was 3.34 and which is also between neutral and agree responses. From this result and the above analysis of process approach and evidence based decision questions, the organization is applying a different process approach method which helps the organization to produce quality products but it has some gap on uses of innovation and creativity to improve processes.

For the last variable, which is Supplier relationship the mean value is 3.55. This mean value implies that the average of the subjects responses skewed towards agree response. From these results, we can say that the organization works hard to maintain long-lasting relationship

based on mutual benefit. This means that the organization successfully implements QMS system by maintaining good supplier relationships.

The last section is discussion of the qualitative data of interview with the managements and head of department about their awareness of QMS and the challenges they face while practicing of QMS. Their answer about their awareness was good. They point out the need to implement QMS is to achieve superior quality with improved organizational culture and satisfied employees in a way that can help the organization to achieve its vision. They believe practicing of QMS helped to increase patients and employees' satisfaction, improve quality service delivery, competitive advantage and improve customer relations, reduce medical error. Lack of employees commitment, lack of financial resources, insufficient training about QMS implementation, Organizational structure limitation and documentation problem as the major challenges of the organization to implement QMS properly.

## **5.2 Conclusion**

Based on the findings of the study, the following conclusions are drawn by the researcher which helps the organization to draw lessons and conduct improvement plan in relation to the management's responsibility in implementing and practicing QMS. On the strategy of hospital related to quality, the hospital is in good practice of mission statement regarding quality care delivery, quality plan of the hospital, departmental quality plan are some of the good practices of the hospital so as in the implementation process of QMS all these are basic to improve the process and the quality of services. The other good practices, the organization fairly work to satisfy the customer by assessing its current and future needs, formally collect compliance and resolve frequently also had good performance on almost all of 11 EHSTG standards of quality management system activities. Therefore, they should keep on doing this practices and also improving them more so that all the quality characteristics associated with the process of service can be improved.

Based on the finding there are gaps on the activity of budget for improvement is not communicated through the hospital, uses of innovation and creativity that used to improve process and quality of services and other challenges are Benchmarking and experience sharing with other hospitals, lack of continuous training on QMS, employee commitment, resource allocation.

The organization(SPHMMC) The fact that most of the subjects choose to neutral that the organization is continuously improving is may be because, the subjects are working in positions that could not allow to notice continuous improvement in the organization or the

subjects may not work for too long to notice whether the organization is continuously improving or not. In addition to that, they are unaware how to notice continuous improvement in the organization. However, having the facts discussed one can infer that the organization is continuously improving from time to time.

The subjects who filled the questionnaire who choose to be neutral on the questions about the principles of quality management system need to be examined. If the reason is due to lack of awareness the organization needs to consider some awareness creating mechanisms like trainings.

### **5.3 Recommendation**

Based on the above findings and conclusions for sustainable quality improvement the following recommendations are suggested.

- The hospital management should give attention on how to escalating training opportunities for quality members and professionals on Quality and quality related issues.
- Highly focus on strategies on how to improving the quality improvement and how to provide patient focused care and compliant receiving and analysis system.
- The hospitals should allocate specified budget for quality improvement system and give awareness for professionals on how to improve their hospital quality.
- Management should to prepare awareness creation program on the purposes and benefits of QMS in all level to solve some challenges faces to quickly implement QMS.
- For successful implementation of QMS every employee needs to be considered on commitment at all level, effective communication and cooperation within and outside the organization.
- Top management should be giving focus in improving the communication between departments and cooperation between cross-functional departments.
- Setting activities and events that empower staff to share their opinions such as open events and seminars. Setting a holistic strategic vision to improve QMS practices is likely to require coordination and cooperation among several stakeholders.

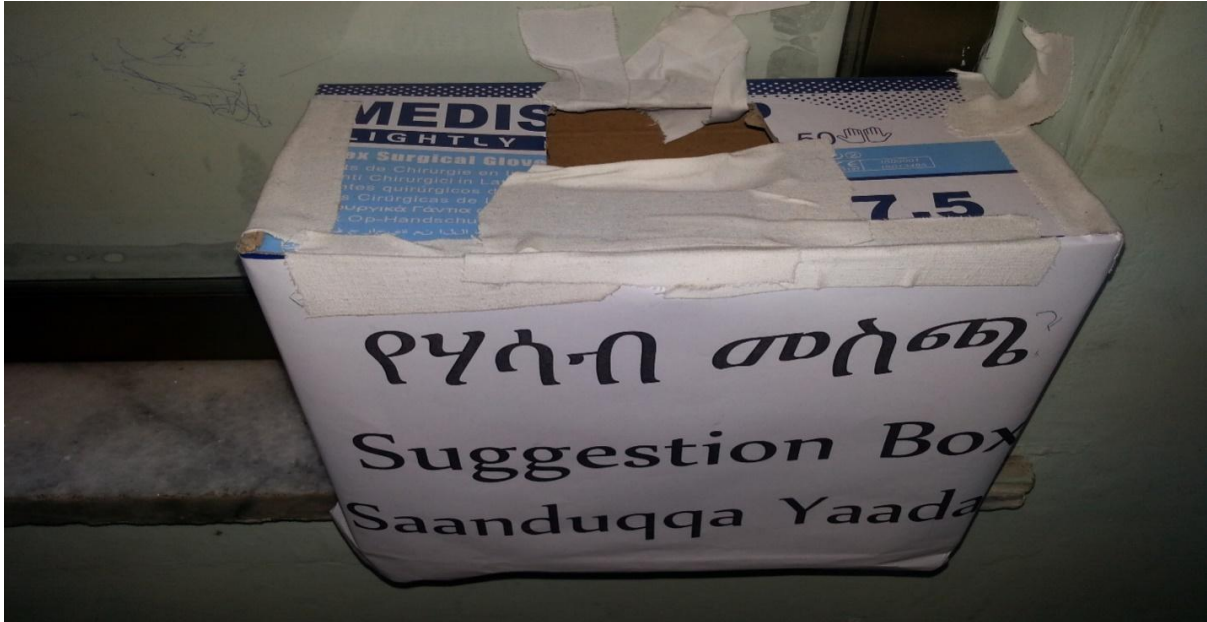
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## Appendix A

### SPHMMC suggestion box





## Appendix B



School of Graduate Studies

Institute of Quality and Productivity Management

### QUESTIONNAIRE

**This questionnaire is to be filled by selected respondents from St. Paul Hospital Millennium Medical College (SPHMMC).**

This questionnaire is designed to collect information regarding the implementation of Quality Management system in your healthcare organization. Therefore, your honest and genuine participation by responding the questions is highly appreciated and helpful to attain the study objectives. Moreover, the study will contribute towards the fulfilment of the researcher's Masters of Science Degree in quality and productivity Management.

I kindly ask you in all regard to fill the questionnaire carefully at your best knowledge. The accuracy of information you provide determines the ultimate reliability of the study. Thank you for your cooperation and willingness to be a part of this research.

**Note:** Your answers will be strictly confidential and will only be used for academic purposes.

**Contact Address:** Bethelhem Kedir Tel: - +251902449257 or +251911884332

E-mail; - bethelhemkedir@gmail.com

**Part One: Demographical Information - Please put 'X' in the box.**

1. Gender of the respondent       Male                                       Female
2. Work position in your organization.....
3. Work Experience;    ≤ 2years                       3-5 years                       More than 5years
4. Educational back ground;    MSC/MA       degree       diploma                       PhD

**Part two: Rate the following question on Hospital Strategy**

Use 'X' for 1= Not available 2= Available but not communicated throughout the hospital 3= Available and communicated throughout the hospital 4 = don't know

s/n	Activities	1	2	3	4
1	Mission statement regarding quality care delivery				
2	Quality plan of the hospital				
3	Departmental quality plan				
4	Budget for quality improvement				

**Part Three. Questions to be responded Yes or No, and with Comments**

This part helps the researcher to identify basic information regarding in your respected organization activities. Please respond to each of the listed statement by saying yes or no and put you comment.

	Activities	YES	NO
1	The hospital has Quality Improvement Unit or case team		
2	Incident reporting and analysis system in each case team		
3	The hospital continuously and systematically reviews and improves all activities that directly affect patients and staff		
4	Clinical audit in each case team		
5	Monitoring clinical outcome in each case team		
6	Patient right and responsibility posted in service areas		
7	Patient satisfaction survey conducted(in/out patient)		
8	Complaints received analysed and discussed with the staff		
9	Benchmarking and experience sharing with other hospitals		
10	The hospital implements a strategy to provide patient focused care which incorporates, compassion, respect and dignity for patients		
11	The hospital developed quality improvement strategy and operation Plan in each case team		

**Part four: QMS principles and practices related questions**

This following sections deal with your opinion about your organization’s implementation of Quality Management system principles. The following statements are presented for your evaluation. Please ‘X’ the number of the response which best represents the level of agreement that indicates whether you:

1 = strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = strongly agree

s/n	Statements regarding with customer focus	1	2	3	4	5
1	Your organization know that who is our customer					
2	Your organization emphasizes on assessing current customers’ needs and expectations.					
3	Patient satisfaction is consistently monitored and changes are made in response to the data collected.					
4	Patient satisfaction data is regularly reported to hospital top management.					
5	Customer complaints are frequently resolved by employees of the organization					

s/n	Statements regarding with leadership	1	2	3	4	5
1	Hospital top management sets specific objectives for quality improvement.					
2	Hospital top management reviews quality improvement activities in meetings.					
3	Hospital top management supports the long-term quality improvement process.					
4	Top management is a primary driving force behind quality improvement effort					
5	Senior executives involve on activities that enhance customer satisfaction by obtaining information on needs and suggestions for quality improvement directly from customers					

s/n	Statements regarding with engagement of people	1	2	3	4	5
1	Every employee’s thought has been used as an input to make any quality decision.					
2	H08 Cross-departmental teams are utilized to evaluate hospital quality improvement or quality of care					
3	Every employee are participate on the process of quality improvement					
4	The organization has an effective system for employees to make suggestions to management on how to improve quality					
5	The organization’s employees are given training in statistical and quantitative methods that support quality improvement					

s/n	Statements regarding with process approach	1	2	3	4	5
1	The organization identifies the key business processes by prioritizing on the basis of the value chain, customer needs and strategic significance, and using process models and definitions					
2	The organization uses innovation and creativity to improve processes by adopting self-managed teams, business process improvement and idea schemes.					
3	The organization reviews processes and sets improvement targets by empowering process owners to set targets and collect data from internal and external customers					
4	Statistical control charts are used to monitor processes throughout the hospital.					
5	The organization change processes and evaluate the benefits through process improvement or re-engineering teams, project management and involving customers, and suppliers					

s/n	Statements regarding with continuous Improvement	1	2	3	4	5
1	Everyone in the organization is aware of the need to improve continuously and show their efforts for improvement					
2	The causes of all the possible faults are identified, informed and employees are well trained on common types of faults and how to manage problematic situations when happened					
3	Continuous improvement tools (brainstorming, check sheet and other statistical process control) are applied on regular basis.					

s/n	Statements regarding with evidence based decision making	1	2	3	4	5
1	The organization encourages statistical measurements and analysis throughout the organization					
2	Every activity in the organization is recorded by employees					
3	Top management seeks summarized reports of the facts recorded on a daily basis to make quality related decisions					
4	The organization provides planned targets for every employees and subsequent decisions are made based on deviations of actual and targeted outcomes					

s/n	Statements regarding with supplier relationship management	1	2	3	4	5

1	The organization plans and manages the external partnerships which is in line with its overall policies and strategies, being designed and developed to support the effective operation of its processes					
2	The organization maintains successful partnerships with its suppliers through good communications and exchange of information.					
3	The organization have closer relationship with its suppliers which helped the organization to get technical support from its suppliers when needed rather than merely exchange of goods					

## **Interview**

### **Interview Questions**

1. How do you explain the quality management system in your hospital?
2. Who is/are the main player in the quality management system in the hospital?
3. How do you explain the awareness of the staff about quality management system?
4. How do you explain the training of employees on quality management system?
5. Do you think the quality management system has positive effect in the hospital? If your answer is yes how?
6. What are the major challenges faced by your Company in practicing quality management system?
7. What are the benefits of QMS practices implementation in your organization?

**Thank you very much to respond questions in the Questionnaire**