## UNIVERSITY OF KWAZULU NATAL

## **Graduate School of Business**

## EMPLOYEES' PERSPECTIVES ON TOTAL QUALITY MANAGEMENT AT QUEEN ELIZABETH II HOSPITAL

## AND

## THE NEW REFERRAL HOSPITAL

BY

## PALESA CECILIA MAHAO

### 208507606

A Dissertation submitted in partial fulfilment of the requirements for the degree of

## **Master of Business Administration**

Supervisor: Dr Abdul Gani

**Co-supervisor: Gill Manion** 

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Faculty of Management Studies

Graduate School of Business

## Supervisors permission to submit for examination

Date:	4 OCTOBER 2010
Student	PALESA CECILIA MAHAO
Name:	
Student	208507606
no.:	
Dissertation	EMPLOYEES' PERSPECTIVES ON TOTAL QUALITY
Title:	MANAGEMENT AT QUEEN ELIZABETH II HOSPITAL AND THE NEW REFERRAL HOSPITAL

As the candidate's supervisor,



I AGREE to the submission of this dissertation for examination I DO NOT AGREE to the submission of this dissertation for examination

### The above student has satisfied the requirements of English Language competency.

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Name	of	Sur	er	visor.
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Signature:	Date:	
0		

Name of Co-supervisor (if applicable):

Signature:	 Date:	

## DECLARATION

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#### ABSTRACT

Total Quality Management (TQM) has become the focus of all organisations that strive for excellence in service delivery. The healthcare sector is not an exception though it is exclusively different from other organisations because of the nature of service they provide, and the kind of risk involved in service provision. The aim of this study was to assess employees' perceptions about TQM at Queen Elizabeth II hospital, and their expectations regarding TQM implementation in the new Private Public Partnership (PPP) National Referral hospital. It also sought to measure the gap that exists between employees' perceptions and expectations. It focused on three fundamental principles of Total Quality (TQ), namely 'focus on customers and stakeholders', 'participation by everyone and teamwork', as well as 'process focus and continuous improvement'.

This, quantitative research study, utilised a cross-sectional approach. The selfadministered questionnaires were employed to obtain data. A stratified sample of 240 employees was drawn from Q.E.II hospital employees, which represented a population size of approximately 685 employees. Out of the sample size of 240, only 157 questionnaires were completed and returned. The respondents comprised of 38.2% males and 61.8% females. The highest percentage of the respondents (53.5%) was in the clinical category; 33.8% in Administration; 8.3% in 'other' health professionals such as pharmacy, laboratory, and radiology. The lowest percentages of 3.8% and 0.6% were in Accountancy and Human Resources categories respectively.

The findings of this study revealed that employees have relatively low perceptions about TQM at Q.E.II hospital, while their expectations regarding TQM in the new PPP National referral hospital are extremely high. Process focus and continuous improvement attained a larger overall gap between perceptions and expectations. Although an analysis revealed that focus is needed in all areas that constitute total quality, but evidence suggests that process focus and continuous improvement need special attention. Thus, it is recommended that management creates a quality culture through strong leadership, putting the needs of both employees and patients in the fore-front, ensuring that employees understand hospital processes, and mostly, continuously improving the hospital processes.

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## **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

Acronym/abbreviation	Description
ASQ	American Society for Quality
CI	Continuous Improvement
C.O.S.C	Cambridge Overseas School Certificate
CQI	Continuous Quality Improvement
СТQ	Critical To Quality
CVNHST	Cardiff and Vale NHS Trust
DMAIC	Define, Measure, Analyse, Improve, and Control
НСА	Hospital Corporation of America
ISO	International Standards Organization
J.C	Junior Certificate
PDCA	Plan-Do-Check-Act
РРР	Public Private Partnership
Q.E.II	Queen Elizabeth II Hospital
SERVQUAL	Service Quality
ΤQ	
TQM	
US	

#### **CHAPTER 1**

#### **INTRODUCTION**

### **1.1 INTRODUCTION**

Lesotho's healthcare service delivery has been and continues to be of concern for the Lesotho government, as well as all Lesotho citizens. The key alarm revolves around the deteriorating state of Queen Elizabeth II (Q.E.II) Hospital, the main government referral hospital in Lesotho. The government has come to realize that there is a need to improve healthcare services in Lesotho, as the Minister of Finance and Development Planning, Dr Timothy Thahane announced that "replacing Queen II Hospital is an urgent requirement in order to improve health services offered to Basotho" (Mokemane, 2007).

The government has taken major steps towards improvement of healthcare in Lesotho. On the 27 October 2008, the government of Lesotho and a regional consortium led by healthcare services group Netcare signed a landmark Public-Private Partnership (PPP) agreement to build a state-of-the-art public hospital that will dramatically improve the quality of healthcare in Lesotho (International Finance Corporation, 2008). The new hospital will provide a range of services, highly trained staff and specialized medical equipment, while serving as the national primary clinical and training facility for health professionals (Naidoo, 2009).

This chapter delineates the background of Q.E. II Hospital, provides the motivation for the study, the focus of the study, the problem statement, the research questions, the objectives of the study, as well as the limitations of this study.

#### 1.2 Background of Queen Elizabeth II Hospital

The Lesotho Health System is divided into the following tiers: Health posts and Health Centers at the primary level, Lesotho Flying Doctors Services which endow with Health Centers in the mountainous areas which are hard to reach; the secondary level comprises of District Hospitals; the tertiary level comprises of hospitals that provide specialized referral services for all the District Hospitals, as well as the Filter Clinics which are intended to reduce the workload in the main referral hospital - Q. E. II Hospital (Ministry of Health and Social Welfare, 2005).

Q. E. II Hospital is the main public referral hospital, which was established in the late 1950s with the aim of providing all the people of Lesotho with comprehensive medical care through a range of specialist services (CVNHST, 2008). It is the referral centre for the 14 general hospitals in the nine health districts outside Maseru and three general hospitals in the Maseru Health District, in which it serves a population of almost 500 000 and 1.8 million in the secondary level and tertiary level, respectively (CVNHST, 2008).

Table 1.1 provides detail of inpatient utilisation levels in Q.E.II hospital

In-patient U	Jtilization
Avg. No. of available beds	410 beds
Avg. % occupancy	82%
Avg. Length of stay	5.94 days
No. of admissions	15,465 patients
No. of deliveries	5,116
All other	10,49

Table 1.1: In-patient Utilization
-----------------------------------

Adapted from: Bicknell, Babich & Jack, 2009. *Queen Elizabeth II hospital and the New PPP hospital: Baseline study – Key findings, Discussions and Recommendations*. Vol.1. From table 1.1 it is shown that the hospital has a capacity of 410 acute care beds, with an average of 82% occupancy and an average length of stay of 5.94 days, and it admits patients on general surgical, paediatric, neonatal, medical, eye, ENT, orthopaedic, obstetrical and gynaecology, and other medical conditions such as injuries and chronic illnesses (CVNHST, 2008; Bicknell, Babich & Jack, 2009).

#### **1.2.1** Service quality Problems at Q.E II hospital

Q.E. II hospital is aging and gradually becoming depleted and a poorly performing health facility (Molapo, 2008). Also, there are numerous deficiencies in service, caused by a combination of factors including: inadequate number of certain staff, particularly nurses and physicians; inadequate supervision, lack of in-service training of staff; maintenance and supply issues largely attributable to management challenges and a general lack of accountability for personal performance or lack thereof (Bicknell et al., 2009:20).

These problems have resulted in staff dissatisfaction, low work morale, high rates of turnover, and consequently, unsatisfactory patient care. In the survey conducted by Bicknell et al., (2009), the results indicate that 60% of employees surveyed reported being "somewhat' and "very dissatisfied'; and they also indicated turnover of about 35.4% of physicians and dentists, and 27.8% of professional nurses during the 2006-2007 fiscal year (Bicknell et al., 2009:48).

#### **1.2.2** New Public Private Partnership referral hospital

The Lesotho government has subsequently recognized the need to enact a wideranging solution to quality problems at Q. E. II hospital. Hence, the government entered into a public private partnership (PPP) with the private health sector to replace Q. E. II Hospital with a modernized PPP referral hospital in which an optimal quality service delivery and Total Quality Management (TQM) will be ensured. PPP approach is regarded as a "very farsighted and proactive comprehensive systems approach to solving the problems that have plagued Q.E. II hospital for many years" (Bicknell et al., 2009:48).

#### **1.3** Motivation of the Study

TQM is an imperative aspect of healthcare due to the uniqueness and complexity of healthcare service. According to Jackson (2001:157) "securing TQM is a desired goal for everyone working in or associated with healthcare". This study is motivated by Jackson's concern that accomplishing TQM in health institutions is not always easy, hence, some healthcare professionals feel a sense of despair when management promote TQM measures due to some assertions that TQM in healthcare is a "worthless endeavor that achieves no benefits whatsoever' (Jackson, 2001:157). Therefore, by exploring employees' perceptions and expectations about TQM, this study will be of great benefit to the hospital as a whole as it will enable the hospital employees to present their views about better ways of ensuring optimal service quality in the hospital. It will also help hospital management and PPP coordinators to understand the expectations of the employees and to take appropriate actions in ensuring that TOM becomes a success in the new PPP referral hospital. Most importantly, by revealing the insight of the existing problem, this study will allow the Ministry of Health and Social Welfare to align the health service delivery with international health standards, which in turn will benefit the entire Basotho nation.

#### **1.4 Focus of the Study**

This study intends to measure the employees' perceptions about TQM at Q.E II hospital, and to understand their expectations regarding TQM that will be implemented in the new PPP referral hospital. It also seeks to determine the "gap' between employees' perceptions and expectations. The focus is on three

fundamental principles of Total Quality (TQ) namely: focus on customers and stakeholders; participation by everyone and teamwork; and process focus and continuous improvement.

#### **1.5 Problem Statement**

Service delivery in healthcare institutions is expected to be of high quality because of the unique nature of healthcare consumers in terms of their physical, mental and emotional status. However, Q.E. II hospital is a poorly performing health facility, and previous studies have revealed that the existing service problems in this hospital have resulted in employee dissatisfaction, low work morale, and subsequently, poor service delivery. As such, there is a need for research to seek employees' perceptions about TQM at Q.E. II hospital, and to understand their expectations about TQM to be implemented in the new PPP referral hospital.

#### **1.6 Research Questions**

This research study attempts to answer the following questions:

- What perceptions do employees have with regard to service quality at Q.E. II hospital?
- What are the employees' expectations with regard to TQM implementation in the new PPP referral hospital?
- What factors contribute to the gap between employees' perceptions and expectations?
- In which areas do the employees wish to see more improvements in the new PPP referral hospital?

## 1.7 Objectives

This research study aims to investigate the quality of service at Q.E. II Hospital. The objectives of this research are as follows:

- To assess the perceptions of employees on TQM at Q.E. II hospital
- To explore the expectations of employees on TQM implementation in the new PPP referral hospital
- To determine the SERVQUAL gap between the perceived and expected service quality
- To identify areas that need more attention in the new PPP referral hospital to bridge any identified gap

### 1.8 Limitations of the study

This study could have been more successful if it was not for the following limiting factors:

- Time and financial constraints became the major restraining factors for this study.
- The participants in this study were hospital employees such as doctors, nurses and other health professionals, who are always busy with patients, and had little or no time to complete the questionnaires. Thus, out of the sample size of 240 employees, which represented a population of 685 employees, only 157 questionnaires were completed and returned.
- The research study was undertaken after the participants had been involved in industrial action (strike), which may have influenced the responses they provided.

#### 1.9 An outline of the research Report

This research report comprises of six chapters. These are as follows:

Chapter two is the literature review, which revolves around the theoretical aspects gathered from various materials regarding the concept of quality, service quality, total quality management, employee perceptions and expectations of total quality, as well as the conceptual gap model. The pertinent literature was reviewed to establish a point of reference for best practices concerning TQM in healthcare.

Chapter three is the research methodology. This chapter outlines the methods that were used in conducting the research, which was based entirely on primary data. Self-administered questionnaires, consisting of three sections were used to obtain information from the respondents. This chapter also specifies the sampling techniques for this study. It shows that from a population of 685 Q.E.II hospital employees, the stratified sample of 240 employees was selected.

Chapter four is the presentation of the findings of this research study. It represents the results of the study on the basis of three sections of the questionnaire as follows: Section A, demographic information; section B, employee perceptions, and section C, employee expectations. It also measures the gap that exists between the employees' perceptions and expectations of TQM. The results are represented in tables and graphs to make them more presentable and easily understood.

Chapter five is a discussion of the findings and provides an analysis and in-depth interpretation of the results.

Chapter six is the conclusion and recommendations. This final chapter attempts to draw inference from the results showing clearly that the problem indeed exists. It further provides recommendation for successful implementation of TQM in the new national referral hospital, as well as suggestions for future research.

## 1.9 Summary

This chapter provides an overview of the research study. It presents the background of Q.E II hospital, the motivation and focus of the study. It details the problem and associated research questions, the objectives of the study, and the limitations of this study. It also provides a brief outline of this research report. The following chapter will explore the existing literature on service quality, healthcare service quality and TQM, as well as employee perceptions and expectations.

# CHAPTER 2 LITERATURE REVIEW

#### 2.1 INTRODUCTION

TQM has become the focus of almost all organizations that strive to ensure sustainability and excellence of the service they provide. The healthcare sector is no exception in this regard, though it is specifically different from other service sectors in various ways due to the nature of high risks involved which make measuring the patients' satisfaction and service quality in a healthcare setting more important and complex (Taner & Antony, 2006).

The complexity of healthcare quality evaluations raises problems owing to service size, specialization and expertise of service providers within the healthcare organizations (Naidu, 2008). Various authors have argued on the appropriate and more accurate measurement of high quality healthcare. Schneider and Bowen (1993) cited in Slatten (2008:371) inferred that employee satisfaction is a significant predictor of service quality. Strasser et al (1999) cited in Naidu (2008) suggest that healthcare quality can be assessed by taking into account the perceptions of observers such as friends and family, who represent potential future customers and major influencers of patient healthcare choices.

Lim and Tang (2000:103) point out that to respond to these exigent tasks, "Health organizations have to be reprogrammed and renewed to reposition themselves for the future". Healthcare organisations across the globe are, therefore, taking considerable strides to improve the quality of healthcare service. However, Ovretveit (2000:74) maintains that "not all of the measures taken have been successful; some have added bureaucracy and higher costs to healthcare". TQM is one approach, which is widely recognized and has shown to improve quality and reduce costs in healthcare (Ovretveit, 2000; Lim & Tang, 2000; Martins & de Toledo, 2000; Duggirala, Rajendran & Anantharaman, 2008).

This chapter provides an understanding of the concept of TQM in healthcare by exploring the existing literature which outlines and discusses quality, quality of service, quality of healthcare service, TQ and TQM techniques, as well as employee perceptions and expectations of TQM.

#### 2.2 EVOLUTION OF QUALITY

Quality can be a confusing concept, partly because "people view it in relation to differing criteria based on their individual roles, and also because the meaning of quality continues to evolve as the quality profession grows and matures" (Evans & Lindsay, 2008:12).

Several researchers (Basu, 2004; Slack, Chambers & Johnston, 2004; Sower, 2008; Evans & Lindsay, 2008), describe modern quality revolution as follows:

- the first modern revolution occurred in the United States (US) in the late 1920s with the work of Walter Shewart;
- the second quality evolution occurred in Japan in the 1950s with the work of W. Edwards Deming, Joseph Juran, and Armand V. Feigenbaum, and resulted in Japan's emergence as an economic power;
- the third quality evolution began in the US during the early 1970s when the work of Deming, Juran, Feigenbaum and Phillip Crosby was finally recognized and put into practice in this country;
- Kaoru Ishikawa was the foremost figure in Japanese quality, and he was influential in the development of the broad outlines of Japanese quality strategy;
- Deming strongly advocated the philosophy of Genichi Taguchi, a Japanese engineer.

#### 2.2.1 Quality Gurus and their definitions of Quality

The definition of quality raised a lot of debate among quality gurus and other quality scholars such as Garvin, Parasuraran, and others (Basu, 2004; Sower, 2008; Evans & Lindsay, 2008). Their definitions are discussed below:

**Walter Shewart** suggested that quality has two aspects: "the objective aspect, which refers to quality of things as an objective reality independent of the existence of man; and the subjective aspect, which refers to quality as what we think, feel or sense as a result of the objective reality" (Sower, 2008:4).

**Juran** defined quality as "fitness for use" (Sower, 2008:4). This definition suggests that quality may be viewed from both external and internal perspectives; quality is related to 1) product performance that results in customer satisfaction; 2) freedom from product deficiencies, which avoids customer dissatisfaction. He asserts that the way products and services are designed, manufactured and delivered, and serviced in the field all contribute to fitness for use (Evans & Lindsay, 2008). **Parasuraran** and others extended Juran's definition by defining quality as "meeting or exceeding customer expectations" (Sower, 2008:4).

**Deming** agreed with Shewart that quality is subjective and must have commercial value. He stated that a product or service possesses quality if it helps somebody and enjoys a good and sustainable market (Sower, 2008). He further argued that "just to have the customer satisfied is not enough, one has to operationalize the customer-focused definition (define internal and external customers), once the customer has been defined, ways must be found to meet or exceed customer expectations, which will result in a satisfied customer" (Sower, 2008:4).

**Feigenbaum** places emphasis on the importance of management and participation by all employees (Slack et al, 2001). He views quality as "a strategic business tool that requires involvement from everyone in the organization" (Evans & Lindsay, 2008:100). Feigenbaum's philosophy is summarized in three steps to quality: quality leadership; modern quality technology; and organizational commitment (Evans & Kindsay, 2008:100-101). **Kaoru Ishikawa** viewed quality from all aspects of the organization. According to him quality means quality of work, quality of service, quality of information, quality of process, quality of division, quality of people, including workers, engineers, managers, and executives, quality of system, quality of company, quality of objectives, etc. (Burrill & Ledolfer, 1999). He built on Feigenbaum's concept of TQ and promoted greater involvement by all employees, from top management to the front-line staff by reducing reliance on quality professionals and quality departments (Evans & Lindsay, 2008).

**Phillip B. Crosby** developed the concept of "zero defects', which is based on the assumption that "it is always cheaper to do things right the first time, and that quality is "conformance to requirements" (Basu, 2004:20). Crosby's quality philosophy is embodied in what he calls "Absolute of Quality Management", which includes the following points:

- Quality means conformance to requirements, not negligence
- There is no such thing as a quality problem
- There is no such thing as the economics of quality, doing the job right the first time is always cheaper
- The only performance measurement is the cost of quality, which is the expense of non-conformance
- The only performance standard is "Zero Defects" (Evans & Lindsay, 2008:108-109).

**Genichi Taguchi** argued that defining quality as conformance to specification limits is inherently flawed as "it assumes that the customer, either the consumer or department in the production process, would accept any value within the tolerance range, but not be satisfied with the value outside the tolerance range. In his view, "the smaller the variation about the nominal specification, the better is the quality" (Evans & Lindsay, 2008:112).

The organizations such as the American Society for Quality (ASQ), and the International Standards Organization (ISO) also engaged in the debate about the definition of quality.

The **ASQ** suggests that quality has two meanings: 1) the characteristics of a product or service that bear on its ability to satisfy stated or implied needs and 2) a product or service free of deficiencies (Sower, 2008).

The **ISO** defines quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Burill & Adolfer, 1999).

### 2.2.2 Different perceptions of quality

Since there is no comprehensive or generally acceptable definition of quality, Professor David Garvin categorized various definitions into the following five approaches to quality (Slack et al, 2001).

*Judgmental perspective* is based on the notion that quality is determined by the customer through the comparison of features and characteristics of a service or product. This view perceives quality as "synonymous with superiority or excellence, and that quality is both absolute and universally recognizable, thus it cannot be defined precisely, but people just know it when they see it" (Evans & Lindsay, 2008:13; Sower, 2008).

*Customer or User-based perspective* is a stance that quality is determined by "what a customer wants or how well the product performs its intended function" (Evans & Lindsay, 2005:13). In this view quality is in the eye of the beholder, that is, the customer (Garvin (1987) cited in Sower, 2008). This is consistent with Juran's definition that quality is "fitness for use" (Sower, 2008:.4). Juran argues that "an essential requirement of products or service is that they meet the needs of those members of society who will actually use them" (Burill and Ledolfer, 1999).

*Value-based perspective* focuses on the relationship of usefulness or satisfaction to price. Quality product is the one that offers greater usefulness or performance at a comparable or acceptable price (Evans & Lindsay, 2008).

*Design or Product-based perspective* is *a* view that quality is a precise and measurable variable which is a composite of all the attributes that describe the degree of excellence of a product (Sower, 2008). Wild cited in Basu (2004:6) states that "quality of a product or service is the degree to which it satisfies customer requirements, and it is influenced by design quality, which is based on specifications; and process quality, which is the degree to which product or service conforms to specifications".

*Manufacturing perspective* is "concerned with making products or providing services that are free of errors and that conform precisely to their design specification" (Slack et al., 2001:594). Crosby maintains that "any service that conforms to requirements, even where requirements are specified at less than perfection, would be deemed to be defect free" (Basu, 2004:21).

#### **2.3 SERVICE QUALITY**

The concept of service quality has brought a lot of debate among various authors. According to Cronin and Taylor (1992) cited in Rashid and Jusoff (2009:471) "many definitions of service quality revolve around identification and satisfaction of customer needs and requirements". Hoffman and Bateson (2001:324) argue that "customer satisfaction is a short-term, transaction-specific measure, whereas service quality is an attitude formed by a long-term, overall evaluation of a firm's performance". They further maintain that customer satisfaction and service quality are intertwined though the relationship between the two concepts is not clear, because some believe that customer satisfaction leads to perceived service quality, whereas others believe that service quality leads to customer satisfaction (Hoffman & Bateson, 2001). Service quality is also viewed as a measure of how well service delivered matches customers' expectations and how customers perceive the service provided (Naidu, 2009; Rashid & Jusoff, 2009). Hartline et al., (2000) cited in Slatten (2008:370) share the same sentiments that "customer satisfaction is dependent on customers' perceptions of the performance quality of service employees". This view supports the sequential causal model proposed by Heskett:

- "internal service quality drives;
- employee satisfaction, which enables the delivery of;
- high-value service, resulting in;
- customer satisfaction, leading to;
- customer loyalty, which, in turn, produces
- profit and growth" (Slatten, 2008:370).

#### 2.3.1 Service Quality in Healthcare

Service quality in healthcare is more difficult to define than in other service sectors. The reason being that it is characterized by high involvement of the patients in the delivery process (Karassavidou, Glaveli & Papadopoulos (2009), and that it is the patient (customer) himself or herself, and the quality of his/her life being evaluated (Eiriz & Figueiredu (2005) cited in Naidu (2008). Boom and Reeve (2005) cited in Ramsaran-Fowdar (2008:105) argue that healthcare is "credence good, an offering that consumers will never be able to evaluate owing to a lack of medical knowledge, and patients are likely to look for cues or signals that are redolent of treatment quality they receive from a provider".

Most researchers define service quality in two aspects, technical and functional quality (Rashid & Jusoff, 2009). Seth, Deshmuk and Vrat (2005) identified ,,image' as the third component of service quality. They put forward that other factors such as tradition, ideology; word of mouth, pricing and public relations can be expected to build up the image of the organization. This service quality model is presented in Figure 2.1 below.

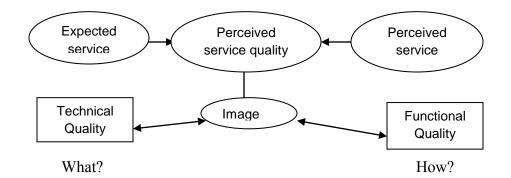


Figure 2.1: The Service Quality Model

Adapted from: Gronroos, 1984 cited in Seth, N. Deshmuk, S.G. & Vrat, P. 2005. Service Quality Models: A Review. *International Journal of Quality and Reliability Management.* 22 (9): 913-949.

Zeithaml, Bitner and Gremier (2009:111) state that "consumers judge quality of service based on their perceptions of the technical outcome provided, the process by which that outcome was delivered, and the quality of the physical surroundings where the service is delivered". In a healthcare setting, technical quality refers to the technical accuracy of medical procedures or the competence of medical staff in terms of how they perform their duties and their compliance with medical specifications; functional quality refers to facilities, cleanliness, attitude of healthcare staff, and the quality of hospital food (Rashid & Jusoff, 2009).

#### 2.3.2 Dimensions of Healthcare Quality – SERVQUAL Instrument

Numerous models of service quality are found in the literature, but the most popular and widely applied model is an instrument known as SERVQUAL, developed by Parasuraman et al (Rashid & Jusoff, 2009; Chaniotakis & Lymperopoulos, 2009; Zeithaml et al, 2009).

While service quality is a multi-dimensional concept, SERVQUAL MODEL focuses on only five dimensions of service quality that are generally applicable to

all service organizations (Rashid & Yusoff, 2009). The five dimensions of service quality are shown in Table 2.1.

SERVICE QUALITY DIMENSIONS		
Dimension	Description	
Tangibles	Physical appearance of the service facility, equipment, personnel, and written material	
Reliability	Ability to perform the promised service dependably and accurately.	
Responsiveness	Willingness to help customers and provide prompt service	
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence.	

Table 2.1: Service Quality Dimensions - SERVQUAL Instrument

Caring,

customers

Adapted from: Rashid, W.E.W. & Jusoff, H.K. 2009. Service quality in healthcare setting. *Journal of Health care Quality Assurance*. 22 (5), PP.471-482.

individualized

attention

given

to

Several researchers have proven the successful application of SERVQUAL instrument in healthcare due to its reliability and validity in measuring service quality (Duggirala, Rajendran & Anantharaman, 2008; Rashid & Yosoff, 2009). Buttle (1994) cited in Rashid and Yusoff (2009:475) identifies the following advantages of SERVQUAL instrument:

- "it is accepted as a standard for accessing different dimensions of service quality;
- It has been shown to be valid for a number of service situations;
- It has been known to be reliable;

Empathy

- The instrument is parsimonious because it has a limited number of items. This means that customers and employers can fill it out quickly;
- It has a standardized analysis procedure to aid results interpretation'.

#### 2.4 TOTAL QUALITY (TQ)

TQ is a concept that helps to broaden the quality outlook by "including key requirements that contribute not only to customer-perceived quality but also customer and stakeholder satisfaction" (Price & Chen, 1993 cited in Aghazadeh, 2002:79). It is a "people-focused management system that aims at continuous increase in customer satisfaction, a total system approach and an integral part of high-level strategy that works horizontally across functions and departments by involving all employees, top to bottom, and extends backward and forward to include the supply chain and the customer chain" (Evans & Lindsay, 2008)

#### 2.4.1 FUNDAMENTAL PRINCIPLES OF TQ

The fundamental principles of TQ refer to "total orientation of all activities of the organization to satisfying customers, and creating value to the various stakeholders - employees, customers, shareholders, suppliers and community" (Martins & de Toledo, 2000:146). These are: focus on customers and stakeholders; participation by everyone and teamwork; and process focus and continuous improvement (Martins & de Toledo, 2000; Evans & Lindsay, 2008). These principles enable an organization to ensure TQ by actively seeking to understand customer and stakeholder needs and expectations; utilizing knowledge and experience of the workforce, and continuously improving all aspects of the organization (Evans & Lindsay, 2008).

#### 2.4.1.1 Focus on customers and stakeholders

TQ embarks on understanding who customers and stakeholders are, and what their needs and expectations are. Hence, Evans and Lindsay (2008:19) infer that "quality begins with the customer, as the customer is the principal judge of quality". The commonly used tool to understand customers and their needs is Hewlett-Packard's internal customer checklist (Slack et al, 2001) shown below:

HP'S INTERNAL CUSTOMER CHECKLIST		TQM ASPECTS
Who are my customers?		Meeting all needs and expectations of patients
What are their needs?		Covering all parts of the organization
What is my service?		Including every person in the organization
What are my customers' expectations and measures?		Examining all the costs related to quality
Does my service meet their expectations?		Getting things ,,right first time'
What is the process for providing my service?	/	Developing systems and procedures
What action is required to improve the process?	<b>└</b>	Developing a continuous process of improvement

Table 2.2: Hewlett-Packard's internal customer checklist

Adapted from: Slack, N. Chambers, S. & Johnston, R. 2001. *Operations Management*. Harlow Essex: Prentice-Hall. p.725.

From table 2.2 it is shown why Slack et al (2001) assert that focusing on customers requires seeking their views regarding service quality and integrating them in all facets of the organization, as Slack et al (2001) state that the whole organization must understand the central importance of customers to its success and survival.

According to Zeithaml et al. (2009) customers build their perception about service quality from service encounters or the "moment of truth'. Their impression of service quality occurs when they interact with the organization, and each encounter determines the customer's satisfaction and willingness to seek service from that organization again (Zeithaml et al. 2009). Therefore, Evans and Lindsay (2008) state that a company close to its customers strives to know their demands, and it continuously develops new ways of reinforcing customer relationships.

#### **Employees as customers**

Slack et al (2001:723) state that "the most powerful aspect of TQ is recognition that everyone is a customer within the organization and consumes goods or services provided by other internal suppliers, and everyone is also an internal supplier of goods and services for other internal customers". Evans and Lindsay (2008) reiterate that employees who regard themselves as both customers and suppliers are able to meet customer requirements in the most effective and efficient manner. Evans and Lindsay (2008:61) draw attention on the motto adopted by many service organisations: "if we take care of our employees, they will take care of our people". They further assert that high-quality service employees require reward systems that recognize customer satisfaction results and customer-focused behaviors, appropriate skills and abilities for performing the job, and supervisors who act more as coaches and mentors than as administrators (Evans and Lindsay, 2008).

#### 2.4.1.2 Participation by everyone and teamwork

TQ is a ,bottom-up and top-down approach' that requires involvement of everyone in an organization from the top management to the lower level employees. Evans and Lindsay (2008) regard this as ,a shift from the traditional view that employees should be "managed" towards empowerment of employees. Employee empowerment means "giving them the responsibility, authority, training and tools necessary to manage quality" (Bozarth & Handfield, 2006:80). According to Oackland and Porter (1994) cited in Hoogervorst and Van der Flier (2005), employee empowerment and involvement in decision-making are important elements of TQ because the true responsibility for quality lies with the person or group actually doing the job. Hyman and Mason (1995) cited in Dimitriades (2000:118) state that employee involvement can take various forms including:

• "job participation consisting of permanent programs in which employees take a formal direct role in decisions relating to job issue,

- consultative participation including long-term interventions like quality circles and employee suggestion schemes, in which employee opinions are sought as mangers engage in decision-making,
- representative participation, in which employees elect councils or board members to represent their interests to management, downward communication, through newsletters and team briefings". Involvement by everyone in an organization is represented in Figure 2.2

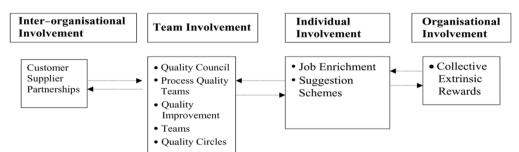


Figure 2.2: A four-tier system of total involvement in TQM

Adapted from: Dimitriades, Z.S. 2000. Total Involvement in Quality Management. *Team Performance Management: International Journal*, 6 (7/8):177-121.

Figure 2.2 provides a schematic view of the inter-relationships for total involvement in quality management

Sower (2008) regards training as the biggest investment in TQ. In addition Zeithaml et al, (2009) state that service employees need training in technical skills which involve operating machines and following procedures and any operational rules; and interactive skills that "allow them to provide courteous, responsive, and empathetic service" (Zeithaml et al, 2009:366).

## The role of Teamwork in TQ

Teamwork is vital in TQ because it focuses attention on customer-supplier relationships and encourages connection of the workforce in attacking system problems, particularly those that go beyond functional boundaries (Evans &

Lindsay, 2008). Katzenbach and Smith (1993) cited in Dimitriades (2000:120) define a team as "a small number of people with complementary skills who are committed to a shared purpose, collective performance goals and a common approach for which they hold themselves mutually accountable". According to Joiner (2007) employees who work together as a team help and support each other and promote an environment where new ideas are freely and openly discussed. Zhou and George (2001) cited in Joiner (2007:618) refer to this as "Co-worker support', which means "co-workers assisting one another in their tasks by sharing knowledge and expertise as well as providing encouragement and support".

## 2.4.1.3 **Process focus and continuous improvement**

#### **Process focus**

A process is the way in which work creates value to customers by linking all activities together, so as to increase one's understanding of the entire system rather than focusing on only a small part (Evans & Lindsay, 2008). According to Slack et al. (2001) it is imperative that managers understand how the process operates by learning about the process, which involves ability to predict how the process performs, and its capability to enhance greater level of performance. Zeithaml et al, (2009:156) state that "the smart service provider defines a process for delivering the services, and structures the feedback around the process, checking in at frequent points to ensure that the client's expectations are being met".

#### **Healthcare process**

The process in the healthcare setting involves setting and defining minimum quality standards; development and monitoring of collaborative care plans; adopting accreditation systems that help in the development of clinical and professional practice, and help the entire health institution to improve its internal management and service delivery (Mohanty, 2008).

The Joint Commission on Accreditation of Healthcare Organisations developed a 10-step Monitoring and Evaluation Process shown in table 2.3 below.

Table 2.3: 10-Step Monitoring and Evaluation Process for Health Care organisations

STEP	PROCESS	DESCRIPTION			
1.	Assign Responsibility	The director assigns responsibility for the specific duties related to monitoring and evaluation			
2.	Delineate Scope of Care	Consider the scope of care provided to establish a basis for indentifying important aspects of care to monitor and evaluate			
3.	Identify Important Aspects of Care	Important aspects of care are those that are high-risk, high volume, and/or problem-prone. This helps to focus or activities with the greatest impact on patient care			
4.	Identify Indicators	Indicators of quality are identified for each important aspect of care. An indicator is a measurable variable related to a structure, process, or outcome of care.			
5.	Establish thresholds for Evaluation	A threshold for evaluation is the level or point at which intensive evaluation of care is triggered			
6.	Collect and Organize Data	Data are collected and organized to facilitate comparison with the thresholds for evaluation			
7.	Evaluate Care	Evaluate the care provided to determine whether a problem exists. This evaluation should focus on possible trends and performance patterns. The evaluation is designed to identify causes of any problems or methods by which care or performance may be improved.			
8.	Take Actions to Solve Problems	Action plans are developed, approved and enacted to solve identified problem or take the opportunity to improve care.			
9.	Assess Actions and Document Improvement	Any actions taken is assessed for effectiveness and then documented. Further actions necessary to solve a problem are taken and their effectiveness is also assessed.			
10.	Communicate Relevant Information to the Organization- wide Quality Assurance Program	Findings from, and conclusions of monitoring and evaluation, including actions taken to solve problems and improve care, are documented and reported monthly through the hospital's established channels of communication			

Adapted from: Evans J.R. & Lindsay, W.M. 2008. *The Management and Control of Quality*. 7<sup>th</sup> ed. USA: Thompson Higher Education.

Table 2.3 provides the 10-Step Monitoring and Evaluation Process, developed by the Joint Commission on Accreditation of Healthcare Organizations. It provides a detailed sequence of activities for monitoring and evaluating the quality of healthcare in order to identify areas that need improvement (Evans & Lindsay, 2008:353).

## **Continuous Quality Improvement (CQI)**

Continuous improvement can be defined as "a purposeful and explicit set of principles, practices, and techniques adopted to generate ongoing, systematic, and cumulative improvement in the processes and output of an organization" (Nilsson-Witell, Antoni & Dahlgaard (2005:756). According to Jorgensen, Boer and Gertsen (2003), continuous improvement means that all members of the organization contribute to improve performance by continuously implementing small changes in their work processes. Bessant and Caffyn (1996) cited in Murray and Chapman (2003) assert that such changes develop overtime through cultural routines and behavioral change. The authors identified five levels of continuous quality improvement as shown in Figure 2.3.

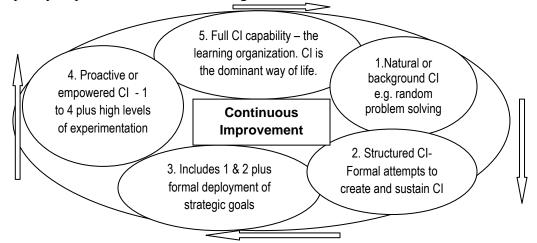


Figure 2.3: Adaptive learning cycle of Continuous Improvement
Adapted from: Murray, P. & Chapman, R. 2003. Continuous Improvement to
Organizational Learning: Developmental Theory. *The Learning Organization*. 10
(5), pp.272-282.

Figure 2.3 shows five levels of CQI through which changes can be tracked and categorized as they progressively develop within the organizations. These are:

- "natural or background CI
- structured CI
- goal-oriented CI
- Proactive/empowered CI
- "full' CI" (Murray & Chapman, 2003, 277).

The CQI approach assumes that there will always be room for improvement no matter how well an organization is doing (Bozarth & Handfield, 2006:79). Deming's "Plan-Do-Check-Act (PDCA) CYCLE, is a tool that helps to continuously look for better methods for quality improvement and sustain the improved results (Basu, 2004; McLaughlin & Kaluzny, 2006; Sower, 2008).

The PDCA cycle was adopted by the Hospital Corporation of America (HCA), who then extended this approach and referred to it as FOCUS-PDCA (McLaughlin & Kaluzny, 2006), as shown in Figure 2.4.

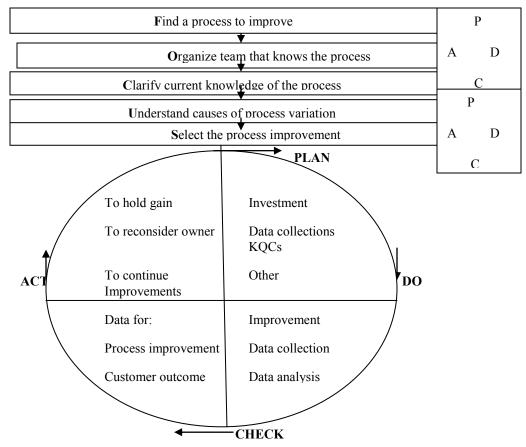


Figure 2.4: The FOCUS-PDCA

Adapted from: McLaughlin, C.P. & Kaluzny, A.D. 2006. *Continuous Quality Improvement in Health Care: Theory, Implementations, and Applications.* 3<sup>rd</sup> ed. London: Jones and Bartlet, Inc.:29.

This FOCUS-PDCA intends to provide the healthcare workers with a common language and an orderly sequence for implementing the cycle of continuous improvement (McLaughlin & Kaluzny, 2006). The HCA inferred that health professionals already have knowledge of the subject matter, and they can easily

- Find a process to improve;
- Organize team that knows the process;
- Clarify current knowledge of the process;
- Understand causes of process variation; and
- Select the process improvement (McLaughlin & Kaluzny (2006).

# 2.5 TOTAL QUALITY MANGEMENT (TQM)

TQM may be defined as "a participative system that empowers all employees to take responsibility for improving quality within the organization" (Luthans, 1995 cited in Karia & Asaari, 2006:31). It involves recognition of all essential organizational activities such as the role of leadership in guiding an organization; how an organization creates strategic plans for the future; how data and information are used to make organization's decisions; how these activities are aligned with quality principles; work together as a system; and are continuously improved as organizational conditions and directions change (Evans & Lindsay, 2008).

TQM may also be regarded as "development of an organization's culture, which is defined by, and supports, the constant attainment of customer satisfaction through an integrated system of tools, techniques, and training" (Shashkin & Kisar, 1993 cited in Talha, 2004:15; Rad, 2006:607).

# 2.5.1 TQM in Healthcare

TQM in healthcare enables different professionals and management to work together in teams to improve healthcare systems Ovretveit (2000). McLaughlin and Kaluzny (2006) state that it is vital to involve appropriate people in the team because they bring with them their roles and status from their regular organizational life, as physicians working on a team with nurses bring with them their higher professional status and authority.

Rad (2006) assert that TQM in healthcare organisations help to improve quality and to build the confidence of patients, health personnel and cost payers in the quality of the context, processes, structures, and outcomes. Ovretveit (2002) identified the following patient satisfaction dimensions through which TQM in healthcare can be viewed:

- "Patient quality: Whether the service provided meets patients' needs,
- *Professional quality:* whether healthcare personnel correctly selects and carry out procedures which are believed to be necessary to meet patients' needs,
- Management quality: the most efficient and productive use of resources to meet patients' needs, without waste and within limits and directives set by higher authority" (Ovretveit, 2000:75).

#### 2.6 WHY TQM PROGRAMS FAIL

Although TQM is found to be a guaranteed approach to quality improvement (Ovretveit, 2000), several studies have shown that most TQM programs are not successful (Martins & de Toledo, 2000; Jackson, 2001; Weile & Brown, 2002; Hoogervorst, Koopman & van der Flier, 2005; Tari, 2005). According to Evans and Lindsay (2008) TQM failures are due to bad management. Curry and Kadasah (2002) cited in Tari (2005) infer that management fail to put critical success factors in place and that results in TQM programs failure. Fuchs (1993) cited in Wiele and Brown (2002:510) identified two root-causes of TQM failures, namely lack of focus on strategic planning and core competencies, and obsolete cultures.

Hoogervorst et al (2005:93) assert that TQM failures are also caused by "inconsistency and incoherence of the organizational context determining employee behavior". They argue that macro organizational aspects such as organizational culture, management practices and organizational structures and systems may result in lack of teamwork due to highly individual focus of reward system; suppression of open discussions about failures; and management practices that frustrate improvements due to decision making sanctions (Hoogervorst & Flier, 2005:93).

Martins and de Toledo (2000) reveal research findings indicating four categories of the main causes of TQM programs failures: Psycho-social, educational, psychological, and technical (Tolovi, 1994 cited in Martins & Toledo, 2000:145). These, as presented by different researchers, are illustrated in Table 2.4.

Author(s)	Main causes of TQM program failures					
Early and	Mission statement not focused					
Godfrey (1995)	Lack of definition and attention to critical points					
	Deficient implementation plans					
	Lack of performance measurements					
Resnick-West	Improper leadership					
(1994)	TQM is not seen as new work system					
	Lack of reference model of quality					
	Lack of strategic focus					
Wood and	Focus on organization's image not on facts and results					
Urdan (1994)	Focus on known internal processes, not on critical ones					
Focus on minimum standards, already established						
Difficulty in maintaining the momentum of change caused by TQM						
Valle (1995) Search for and identification of the existent problems						
Non-existent of quality information system						
	Lack of continuity of program					
	Preventive activity not well-developed					
	Obstructed communication channels and weak coordination between					
	departments					

Table 2.4: Main causes of TQM program failures

Adapted from: Martins, R.A. & de Toledo, J.C. 2000. Total Quality Management Programs: A Framework Proposals. *Work Study*, 49 (4), pp. 145 – 151.

# 2.6.1 Causes of TQM failures in healthcare

According to Kogan et al (1991) cited in Lim and Tang (2001:105), the underlying cause of TQM failures in healthcare is "lack of common definition of quality due to the diverse professional groupings and the inherent characteristics of healthcare services". Rummler and Brache (1995) cited in Towill (2009:187) discovered seven characteristics of "deadly sins' which cover issues often experienced in healthcare practices, such as setbacks in project planning, ignorance, procrastination, lack of commitment, disillusionment, and failure to understand people. These are described below:

Towill's (2009:187) ,,deadly sins' Healthcare characteristics

- 1. *Relevance*: failure to relate process improvement to seamless patient flows.
- 2. *Involvement*: Failure to involve the right people such as clinicians, support staff, and top management in an effective way
- 3. *Direction*: Failure to give "natural group" teams a clear mandate and accountability for achieving it
- 4. *Tampering*: Failure to realize that endless re-organization is no substitute for effective action
- 5. *Consideration*: Failure to understand how change affects "coal-face" staff and now empowering them to make continuous performance improvements
- 6. Implementation: Failure to focus on process improvement action rather than endless analysis and debate
- 7. *Regression*: Failure to ensure that adequate start-up and monitoring systems are in- situ for every project.

# 2.7 IMPLEMENTING TOTAL QUALITY MANAGEMENT

TQM implementation is a very complex task that requires focus and understanding of various factors that contribute to its success. Jackson (2001) infers that it involves the characteristics of service excellence such as strong leadership; employee involvement and empowerment; and focus on both external and internal customers, trust, availability of timely, accurate and useful information, and an

organizational commitment to improve continuously. In addition Matta et al, (1996) cited in Wiele and Brown (2002:510) infer that cultural change; focus on the TQM approach; and employee ownership of the process enhance successful implementation and sustainability of TQM.

According to Mohanty (2008) successful implementation of TQM depends on employees as they take charge of quality through their commitment, creativity and teamwork. The author further states that "voice of the customer is the determining factor in TQM...with the customer at the centre stage guiding and directing the flow of production of products and service, quality is the buzzword and the organization strives to embrace the quality enhancement measures" (Mohanty, 2008, p.298).

## 2.7.1 Factors that influence success of TQM implementation

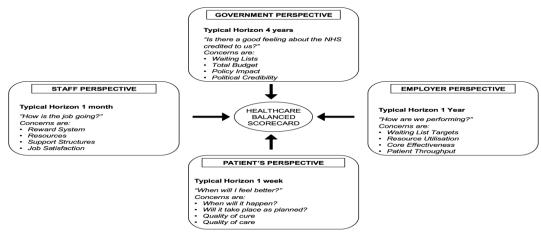
Research has shown that there are various factors that contribute towards successful implementation of TQM (Jackson, 2001; Talha, 2004; Slack et al, 2001). However 14 points proposed by Deming for achieving quality excellence are commonly used and recognized by many organizations (Basu, 2004:18-19; Evans & Lindsay, 2008:100-106). These are:

- Create consistency of purpose toward improvement of a product or service;
- Adopt the new philosophy, whereby management has to learn its responsibilities and to take leadership;
- Cease dependence on inspection and supervision to achieve quality; staff must take responsibility and supervise themselves;
- End the practice of awarding business on the basis of the price tag, but move to dedicated suppliers and value reliability, delivery on time and quality;
- Improve constantly and forever the system of production and service
- Institute training on the job by becoming a learning organisation with a willingness to share knowledge;

- Institute leadership: everyone, at all levels, especially supervisors to be team leaders not disciplinarians; everyone to be encouraged to develop self leadership without leaving quality to management;
- Drive out fear: encourage people to admit mistakes so as to fix not to punish;
- Break down barriers between departments: set clear objectives with everyone striving to work for the common good;
- Eliminate slogans, exhortations and targets for the workforce;
- Eliminate work standards quotas: encourage workers to consider quality;
- Remove barriers that rob the worker of the right to pride of workmanship: give them the right tools, right materials, right processes and comfortable working conditions, treat them with respect; Also, remove barriers that rob people in management or engineering of their right to pride in craftsmanship: this includes appraisal systems which reward on bottom line results and keeping expense budgets low, and ignore customer satisfaction;
- Institute a programme of education and self improvement: encourage staff to seek higher educational qualifications to create a knowledge-based organisation;
- Put everybody in the organisation to work to accomplish the transformation: involve everyone in transforming the culture of an organisation.

## 2.7.2 TQM implementation in healthcare

According to McLaughlin and Kaluzny (2006) TQM in healthcare has a direct impact on patient care, hence its implementation requires dependability of highly skilled and dedicated staff; systems that can often be designed and redesigned to give lower costs at the same time and with the same techniques used for quality improvement; employee empowerment that benefits the organization by creating lateral linkages across highly specialized organizational units to increase effectiveness and reduce the process irresponsibility. Towill (2009) suggests that since most of healthcare delivery problems may be people oriented, there is a need to take into consideration, the perspectives of healthcare players when implementing TQM in the healthcare. These are government, employers, employees, and patients (Towill, 2009). Towill (2009), therefore, developed the Health Balanced Scorecard, which intents to enable change by incorporating the views of the players and facilitating interaction amongst them. This is shown in figure 2.5 below:



Source: Author

Figure 2.5: Healthcare Balanced Scorecard

Adapted from: Towill, D.R. 2009. Enabling effective change in healthcare delivery systems: Did Gerry Robinson teach us anything new? *Leadership in Health Services*, 22 (2):176-188.

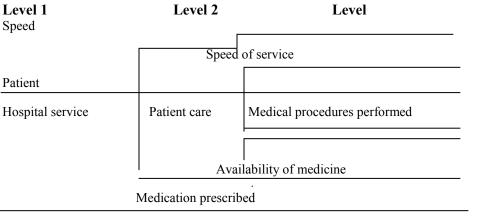
#### 2.7.3 TQM techniques

According to Tari (2005) TQM implementation cannot be successful without the use of quality management methods, which are a set of practices, tools and techniques, and are the basic elements needed to successfully implement TQM. The most commonly used TQM tool is Six Sigma, which refers to "the business improvement approach that seeks to find and eliminate causes of defects and errors in manufacturing and services processes by focusing on outputs that are critical to customers. This approach comprises of five steps – DMAIC, namely, Define, Measure, Analyse, Improve, and Control" (Evans & Lindsay, 2008:132).

*Define stage* is the data collection stage in which customers and their priorities are identified, and the "Critical To Quality' (CTQ) that have impact on quality are also identified (Basu, 2004; 59). The techniques used in this stage include the basic steps to Critical To Quality (CTQ) tree, which focuses on three levels:

- 1. Identify the customer.
- 2. Identify customers' general needs in level 1.

3. Identify the first set of requirements for that need in level 2 CTQ tree is shown in figure 2.6 below:



General need

Behavioral requirement

Figure 2.6: Critical To Quality Tree

Adapted from: Basu, R. 2004. Implementing Quality. London: Thompson Learning

*Measure* Stage focuses on how to measure the internal processes that affect the CTQs. It requires "an understanding of the causal relationships between process performance and customer value" (Evans & Lindsay, 2008:498). A generally used measurement tool is "Cause and effect' or fishbone diagram, which shows "hypothesized relationships between potential causes and the problem under study" (Jacobs, Chase & Aquilano, 2009:315). This diagram is shown below;

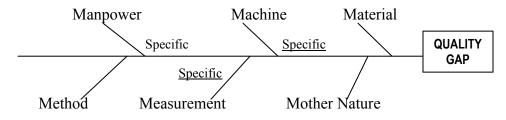


Figure 2.7: Cause and effect diagram

Adapted from: Basu, R. 2004. *Implementing Quality*. London: Thompson Learning; McLaughlin, C.P. & Kaluzny, A.D. 2006. *Continuous Quality Improvement in Health Care: Theory, Implementations, and Applications*. 3<sup>rd</sup> ed. London: Jones and Bartlet, Inc.

3

*Analyse phase:* This stage focuses on understanding "why' defects, errors or excessive variations occur (Evans & Lindsay, 2008:500). The tools and techniques applied in this phase aim to identify and validate the root causes of the problem (Basu, 2004). These include Five Whys, which asks five questions successively with the aim of probing the causes of a problem with the hope of getting to the heart of the problem (Basu, 2004:100). Example of five "Why' questions that can be used when analyzing the hospital quality problem could be as follows:

- Why are patients not satisfied with the service they get in the hospital?
- Why are out-patient queues long?
- Why are there few doctors and nurses?
- Why is there a shortage of equipment?
- Why is the general hospital service delivery poor?

*Improvement phase*: This is the stage where ideas and solutions are put into action (Basu, 2004). It is at this stage where the **Continuous Quality Improvement (CQI)** is implemented. Techniques that can be used to improve the process include an Affinity diagram, which is used to generate creatively a number of ideas and then summarize logical groupings among them to understand the problem and then to lead to a solution (Basu, 2004). An example of Affinity diagram ,generating ideas' is shown in figure 2.8 below:

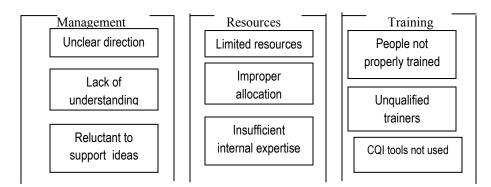


Figure 2.8: Affinity Diagram

Adapted from: Basu, R. 2004. *Implementing Quality*. London: Thompson Learning.

*Control Phase:* The control stage focuses on "how to maintain the improvements, by putting tools in place to ensure that the key variables remain within the maximum acceptable ranges under the modified process. These improvements include establishing new standards and procedures, training the workforce, and instituting controls to ensure that improvements do not die over time" (Evans & Lindsay, 2008:502). The commonly used control quality technique is the Deming cycle or Plan-Do-Check-Act (PDCA) cycle, which can be used to continuously look for better methods for quality improvement and sustain the improved results (Basu, 2004). The use of this tool is as follows:

- *Plan stage*: A plan of action for improvement is formulated based on the analysis of the collected data;
- *Do stage:* This is the stage in which the plan of action is implemented by carrying out the changes that *were settled* on in the plan phase;
- *Check stage*: This is the measurement and evaluation phase, in which results are checked and assessment made to ensure that the quality problem is indeed resolved and the expected performance improvement has been achieved. If not, management must go back to the ,plan' phase and start over;
- *Act stage*: At this phase the outcomes are consolidated or standardized; if the action has been unsuccessful, the lessons learnt are recorded, and the cycle is repeated (Basu, 2004:134; Bozarth & Handfield, 2006).

## 2.8 PERCEPTIONS AND EXPECTATIONS OF TQ

#### Expectations

Zeithaml et al (2009) define expectations as the beliefs about the level of service that is anticipated to be delivered by the service provider, and they are regarded as standards or reference points through which service performance is measured. Researchers have identified different levels of customer expectations (Hamer, 2006; Zeithaml et al, 2009). These are: *normative* expectations, which refer to the level of service expected from an excellent service provider; *predictive* expectations, which refer to the level of service the customer expects to get from a given service provider at a given service situation; and *adequate* expectations, which represent the minimum level of service the customer expects to receive, and it is the minimum tolerable expectations (Harmer, 2006; Zeithaml et al, 2009). These are illustrated in figure 2.9 below:



Figure 2.9: The Zone of tolerance

As shown in figure 2.9, Tolerance zone represents the "difference between desired service and level of service considered adequate" (Zeithaml et al, 2009:80) Authors further state that tolerance zones differ from one customer to another, and from one service dimension to another (Zeithaml et al, 2009).

# Perceptions

Perceptions are inferences made by consumers on the basis of their expectations and their experience of service provided. They "represent customers' subjective views of the level of service they receive in service encounters" (Parasuraman, et al, 1985 cited in Hamer, 2006:220). According to Zeithaml et al, (2009:103), "customers may have perceptions of a single or transaction-specific encounters, which are based on how the customer was treated in a particular encounter; as well as overall perception of an organization based on all their experiences". This implies that perceived service quality results from comparison of the expected service and the service experienced during the encounter (Hamer, 2006).

Adapted from: Zeithml, V.A., Bitner, M.J. & Gremler, D.D. 2009. Services Marketing: Integrating customer Focus Across the Firm. 5<sup>th</sup> ed. McGraw-Hill, New York.

#### Perceived service quality and satisfaction

The view that perceived service quality is the consequence of comparison of expectations with perceptions of service provided implies that there is a significant relationship between perceived service quality and satisfaction. The connection between service quality and satisfaction has received more attention of many researchers (Carman, 2000). Zeithml et al (2009:104) state that "satisfaction is the customer's evaluation of a service in terms of whether that service has met the customer's needs and expectations, and failure to meet them may result in dissatisfaction with the service".

#### Service quality and Employee satisfaction

Service quality may refer to the discrepancy between the service quality that is delivered by the organization and the service performance that employees expect Gronroos (1988) cited in Ramseook-Munhurrun et al, (2009) They infer that "employee satisfaction is an important factor determining service quality, as satisfied employees are more committed to continuous improvement, and are more likely to be committed to delivering quality service by showing highly motivated, good work morale and perform effectively and efficiently" (Ramseook-Munhurrun et al, 2009:544). Furthermore, Karia and Asaari (2006) put forward that since TQM intends to elicit the best from employees, it is anticipated that it will lead to employee satisfaction that will enhance their contribution to the overall attainment of optimal quality within the organization.

## 2.8.1 Gap model

The gaps that arise from service delivery are the key determinants of customer satisfaction and dissatisfaction. Zeithaml et al (2009) state that customer gap occurs between customers' expectations that they bring into the service experience and the perceptions or assessment of actual service experience. These gaps are measured by the "gaps model of service quality', which was developed by

Parasuraman et al (Rashid & Yusoff, 2009; Zeithaml et al, 2009). This model is shown in figure 2.10.

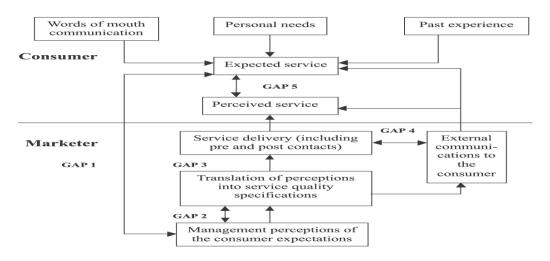


Figure 2.10: The conceptual model of service quality

Adapted from: Parasuraman, 1985 cited in Seth, N. Deshmuk, S.G. & Vrat, P. 2005. Service Quality Models: A Review. *International Journal of Quality and Reliability Management.* 22 (9), pp.913-949.

The model presented in figure 2.10 outlines five gaps hindering service quality:

*Gap 1*: Difference between customer's expectation and management's perceptions of those expectations

*Gap 2*: Difference between management's perceptions of consumer's expectations and service quality specifications

Gap 3: Difference between service quality specifications and actual service delivered

*Gap 4*: Difference between service delivery and the communications to customers about service delivery

*Gap* 5: Difference between customer's expectations and perceived service (Douglas & Connor, 2003:167-168; Deshmuk & Vrat, 2005:916; Rashid & Yusoff, 2009; Zeithaml et al., 2009).

Figure 2.10 and the above discussion show the relevance of the gaps that occur during service delivery to the customers.

## 2.8.2 Bridging the gap

It is important to prevent or close the service quality gaps because an existence of any of them may result in a mismatch between expectations and perceptions hence poor perceived quality (Slack et al, 2001). To close the customer gaps, the model suggests that four provider gaps that occur within the organization providing services, which are the primary causes of customer gap (gap 5) must be closed (Zeithaml et al, 2009). These are:

**Gap 1:** The listening gap (not knowing what customers expect) is the difference between customer expectations of service and the organization's understanding of those expectations (Deshmuk & Vrat, 2005). This gap occurs because managers do not directly interact with their customers due to unwillingness to ask about their expectations, or to address them (Zeithaml et al, 2009).

**Gap 2:** The specification gap (improper quality standards) refers to the difference between the customer's expected quality standards and the organization's designs and performance standards (Zeithaml et al, 2009). The authors further state that some factors contributing to this gap may be "management's belief that customer expectations are unreasonable or unrealistic, hence setting standards may hinder achievement of desired goals" (Zeithaml, 2009:37).

**Gap 3:** The service performance gap (not delivering up to service standards) is the "discrepancy between development of customer-driven service standards and actual service performance provided" (Zeithml et al 2009:38). Some of the factors causing this gap include: employees roles not properly defined; lack of empowerment and teamwork; inappropriate compensation system; and management's failure to facilitate, encourage and require achievement of the set standards (Zeithaml, et al, 2009).

**Gap 4:** The communication gap exists when the promises communicated to the customer do not match the customer's expectations of those promises (Douglas & Connor, 2003). Some of the reasons that contribute to occurrence of this gap may include: over-stating promises; inadequate coordination between departments; and

differences between policies and procedures across service departments (Douglas & Connor, 2003; Deshmuk & Vrat, 2005; Zeithaml et al, 2009).

**Gap 5:** The service quality gap exists when customers' expectations about the perceived service quality are not met. Douglas and Connor (2003) state that this gap is outside the control of an organization, thus there is a need to examine gaps 1-4, which are within the control of an organization, to determine the causes of customer gap, and to establish changes that may be implemented in order to eliminate the gap between customers' expectations and perceptions (gap 5). Thus, Zeithaml et al (2009) assert that the key to closing customer gap (gap 5) is to keep provider gap 1 through to 4 closed.

Slack et al (2001:600) suggest the following actions to be taken in order to reduce gap 5 and ensure high perceived service quality:

- Ensure that there is consistency between the internal service quality specification and customer expectations;
- Ensure that the internal service specification meets its intended design;
- Ensure that the actual service conforms to its internally specified quality level; and
- Ensure that the promise made to customers concerning the service can in reality be delivered.

## 2.9 Summary

This chapter explores the literature on the concept of TQM. It probes different definitions and perceptions of quality, the notion of service quality and healthcare service quality, TQM implementation, and the reasons for TQM failures are also delineated. The literature has revealed that:

• Although quality gurus may define quality in various ways, the focus should be on both internal and external stakeholders;

- Quality in healthcare is difficult to define due to the nature and complexity of healthcare service, which arise from expertise and specialisation of service providers, as well as involvement of patients (external customers) in the service provision;
- TQM is considered a guaranteed approach to quality improvement. However, most of TQM programs are subject to failure due to various reasons including: lack of definition and attention to critical success factors; lack of leadership commitment; and lack of employee involvement;
- Researchers have identified various factors to successfully implement TQM and Deming's 14 points are widely recognised as cited in Basu (2004).
- Customers tend to compare their expectations about the service quality that they hope to receive, and their perceptions about service delivered to them. The discrepancy between customer expectations and perceptions result in service quality gap, which is gap 5;
- To bridge customer gaps requires permanent closure of four provider gaps.

In a nutshell, successful implementation of TQM is enhanced by understanding the existing gaps within the organization that contribute to the gap between customers' expectations of service quality and their perceptions of the actual quality provided, and using the appropriate TQM techniques to avoid failure.

The next chapter discusses the research methodology utilized for this study.

# CHAPTER THREE RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter presents the aims and objectives of the study, it also explains the research design, research methodology and research instruments that were utilized to collect data, the sample and sample size of the research, as well as the method of data analysis and interpretation.

# 3.2 Aim and objectives of the Study

The aim of the study is to obtain empirical data on the perceptions and expectations of a selection of employees regarding TQM, which can be used to improve service quality at the new PPP referral Hospital in Lesotho.

The objectives of the study are:

- To assess the perceptions of employees on TQM at Q.E. II hospital
- To explore the expectations of employees on TQM implementation in the new PPP referral hospital
- To determine the SERVQUAL gap between the perceived and expected service quality
- To determine the areas which need more attention in the new PPP referral hospital to bridge the identified gap

## 3.3 Data Collection Strategies

The strategies used to collect data are discussed below:

## 3.3.1 Research Design and Methodology

# 3.3.1.1 Research Design

There are three main classes of research designs namely exploratory research, descriptive research and causal research (Ghauri & Gronhaug, 2002; Cooper & Schindler, 2006).

*Exploratory research:* According to Ghauri and Gronhaug (2002: 49) exploratory research design is an unstructured research, which is more adequate when the research problem is more or less understood as it should be conducted in the best possible way, and it requires ability to observe, get information and construct explanation.

Cooper and Schindler (2006: 164) state that an exploratory research helps the researchers to:

- expand their understanding of the management dilemma,
- look for ways others have addressed and/or to solve problems similar to their management dilemma or question
- gather background information on their topic to refine the research question
- identify information that should be gathered to formulate investigative questions
- identify sources for and actual questions that might be used as measurement questions
- identify sources for and actual sample frames that might be used in sample design.

*Descriptive research* is characterized by structure, precise rules and procedures, and the problem is well understood and structured with clearly stated research questions (Ghauri & Gronhaug, 2002). Cooper and Schindler (2006:151) further show that descriptive research gives the researcher

• the descriptions of a phenomena or characteristics associated with a subject population (the who, what, when, where and how of a topic),

- estimates of the proportion of a population that have these characteristics,
- discovery of association among different variables.

*Causal research*: In causal research "the problems under study are structured, but the researcher is concerned with the cause and effect of one variable on another" (Ghauri & Gronhaug, 2002, 50). DJS Research Ltd (2005-2009) states that it measures the impact that the specific change will have on existing norms. Moreover, in causal research, the research is "interested in understanding, explaining, predicting, and controlling relationships between variables than in discerning causes" (Cooper & Schindler, 2006, 154).

# 3.3.1.2 Research methodology

There are two research methods used for data collection. These are qualitative research methods and quantitative research methods.

*Qualitative research method:* This is a "mixture of the rational, explorative and intuitive where the skills and experience of the researcher play an important role in the analysis of data" (Ghauri & Gronhaug, 2002: 86). It "aims to achieve an in depth understanding of a situation by using an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning not the frequency of certain more or less naturally occurring phenomena" (Cooper & Schindler, 2006: 196).

The techniques used in qualitative method include:

- historical reviews in which the researcher evaluates historical, contemporary confidential or public reports or documents and describes what happened in the past in order to understand the present or plan for the future
- in-depth interviewing, usually conversational rather than structured

- focus groups which may also be referred to as group discussions whereby the researcher gets together with different respondents at the same time and initiate a discussion on certain topic
- participant observation whereby the researcher perceives at firsthand what participants in the setting experience
- case studies is used when the area of research is relatively less known. It is whereby the researcher carries out intensive case studies of selected incidents or decision making processes

(Ghauri & Gronhaug, 2002; Blumberg, Cooper & Schindler, 2005).

The advantages of qualitative research methods as identified by Ghauri and Gronhaug (2002: 109) and Blumberg, Cooper and Schindler (2005) are as follows:

- it produces rich and in-depth data expressed in respondents' own words and reactions
- it is quick, flexible and inexpensive method of data collection
- it gives the researcher a chance to observe reactions of respondents in open and free conversation
- it allows the researcher to interact directly with the respondents and to react and build upon discussion as it goes
- the results from data collected in through this method is easy to understand
- In-depth interviews enable the researcher to have a more accurate and clear picture of a respondent's position or behaviour because of openended questions and because respondents are free to express themselves
- Through observation, the researcher can collect first-hand information in a natural setting

• The researcher can easily interpret and understand the observed behaviours, attitude and situation more accurately and capture the dynamics of social behaviour

Ghauri and Gronhaug (2002) identified the following disadvantages of qualitative research methods:

- It is difficult to summarise and categorise the information gathered through focus groups
- In focus groups, the responses of the group members are not independent of one another, and may be influenced by the responses of the dominant group members
- In-depth interviews require a skilled and cautious interview who fully understands the research problem, purpose and what information is being sought
- Interviews can take a very long time
- Interviews are very difficult to interpret and analyse
- Coding of in-depth interview is very difficult
- It is difficult to translate the events or happenings into scientifically useful information because most observations are made by individuals who systematically observe and record a phenomenon
- In observation, the participants know that they are being observed as the researcher joins the organisation to be able to observe as the participants. Hence, the participants may behave differently when they are observed
- Historical reviews may be unreliable as people keeping records sometimes make mistakes or misunderstandings

*Quantitative research method:* According to Cooper and Schindler (2006: 198) quantitative method has the following characteristics:

• it attempts to answer the questions related to how much, how often, how many, when, and who

- it requires that the researcher maintains a distance from a research so as not to bias the results
- it consists of participant responses that are coded, categorised and reduced to numbers so that these data may be manipulated for statistical analysis

The techniques used in quantitative research method include structured, closedend questionnaires and surveys of large number of people (Ghauri & Gronhaug, 2002). The authors identified the following advantages and disadvantages of quantitative method:

- It is an effective tool to get opinions, attitudes and descriptions as well as cause and effect relationships
- Data can be collected and analysed quickly
- It is useful for sensitive issues as anonymity is maintained
- It allows the researcher to generalise the information if the response rate is high

The disadvantages of quantitative research methods are as follows:

- It is time-consuming and expensive to construct and administer questionnaires
- The researcher may get an inadequate information as they are unable to probe questions from participants
- The participants are unable to express themselves as they rely on structured and closed-ended questions

(Ghauri & Gronhaug, 2002; Cooper & Schindler, 2006).

The differences between qualitative and quantitative research methods are summarized in table 3.1 below:

Qualitative	Quantitative		
-Emphasis on understanding -Focus on understanding	-Emphasis on testing and verification		
from respondent's point of view	-Focus on facts and/or reasons for social events		
-Interpretation and rational approach	- Logical and critical approach		
-Observations and measurements in natural settings	-Controlled measurement		
-Subjective "insider view' and closeness to data	-Objective "outside view' distant from data		
-Explorative orientation	-Hypothetical-deductive; focus on hypothesis testing		
-Process oriented	-Result oriented		
- Holistic perspective	-Particularistic and		
-Generalization by comparison of properties and	analytical		
contexts of individual organism	-Generalization by population membership		

Table 3.1: The difference in emphasis in qualitative versus quantitative methods

Adapted from: Reichardt and Cook (1979) cited in Ghauri, P. & Gronhaug, K. 2002. *Research Methods: A Practical Guide*. Prentice-Hall: London

# **3.3.2** Description and purpose of research method used

This study used the quantitative research method and it utilized the cross-sectional method, which refers to the "study conducted only once and reveals a snapshot of one point in time" (Cooper & Schindler, 2006:708). Survey methods were employed to collect data. Surveys refer to "data collection methods that utilize questionnaires or interview techniques for recording the verbal behavior of respondents" (Ghauri & Gronhaug, 2002:93). These were used to get the employees' views about TQM at Q.E. II hospital and their expectations about TQM implementation in the new PPP referral hospital.

# 3.3.2.1 Why quantitative research method

The quantitative research method was considered to be appropriate for this study because of the following reasons:

- The study sought employees' opinions with regard to the extent to which TQM is practiced at Q.E.II hospital, and their expectations regarding its implementation in the new PPP referral hospital. Hence, quantitative research method is an appropriate tool to get the views of employees in this matter.
- Due to the sensitivity of the issue under study, quantitative method is appropriate as it maintains the anonymity of the respondents.
- Since this method is concerned with the question of how many, how often, when, how and who, it was appropriate for this study because it enables the researcher to categorise the employees' responses in terms of their employment category, length of service, gender and age, and to determine the percentage of those who have either positive or negative perceptions regarding the practice of TQM at Q.E. II hospital, and their expectations about TQM implementation in the new PPP referral hospital.

# **3.3.2.2** Construction of the research instrument

The instrument used to collect the data for this research was a questionnaire. A questionnaire "is regarded as a series of questions, each one providing a number of alternative answers from which the respondents can choose" (White, 2000:50).

The questionnaire for this study was divided into three sections:

- Section A: respondent demographic information
- Section B: employees' perceptions about TQM at Q.E. II hospital
- Section C: employees' expectations on TQM implementation in the new PPP referral hospital.

The following guidelines for constructing questionnaires, as advised by Ghauri and Gronhaug (2002:98-100), were used in construction of the questionnaire:

- The questions asked must be in a very simple and concise language
- No "unrealistic demand' should be put on the respondent's know-how, memory and willingness to respond
- Should ensure that everybody understands the question in the same manner
- Each question should deal with only one dimension
- The questions should not be of a suggestive nature, directing respondents towards an answer or a specific opinion
- The questions should be formulated in a polite and soft language
- The language and words used in the questions should be straight forward, hidden meanings must be avoided
- Questions should be placed in a ,right' order
- The layout of the questionnaire should be neat and tidy to influence respondents' willingness to answer
- Questionnaire pre-testing should be done to check the level of difficulty, understanding, and sensitivity of questions.

# **3.3.3 Sampling Design and Sampling Techniques**

The sampling design and techniques for this survey followed the procedure for drawing a sample as discussed below:

- *Define the population*. The population for this survey was all 685 Q.E.II Hospital employees.
- *Identify the sampling frame*. This refers to "the list of elements from which the sample is drawn" (Cooper & Schindler, 2006:411). The sampling frame for this survey is the staff complement for Q.E.II hospital, September 2009.
- Select a sampling procedure. The simple random (probability) sampling was used for this study. This is the sampling method in which "all units in the population have the same chance (probability) of being included" (Ghauri and

Gronhaug, 2002:114). The participants for this research study were randomly selected from various categories of employment such as Accountancy, Administration, Clinical, Human Resources, as well as "Other' health professionals consisting of Pharmacy, Laboratory, and Radiology.

- Determine the sample size. Cooper and Schindler (2006) state that how large a sample should be is a function of the variation in the population parameters under study. The sample size for this study was determined by using a distribution table. At a confidence level of 95% and a margin of error of 5%, the sample size for this study was determined as 240.
- And collect data from the sampled units. Data was collected from the sampled units through self-administered, pre-coded questionnaires, which were hand-delivered personally by the researcher to the respondents. The completed questionnaires were also collected by the researcher from the participants.

#### 3.4 Validation

The survey research begins with ensuring the validity of the research instrument. Validity refers to the extent to which a test measures what the researcher actually wishes to measure (Cooper & Schindler, 2006).

According to Cooper and Schindler (2006:210) the researcher may determine the content validity through:

- context definition of the topic, the items to be scaled, and the scales to be used;
- 2. use of a panel of persons to judge how well the instrument meets the standards.

In determining the validity of the questionnaire used in this research study, the researcher firstly established the research topic, and designed the questionnaire based on the areas that constitute the three fundamental principles of TQ, namely: focus on customers and stakeholders, participation by everyone and teamwork,

and process focus and continuous improvement. Secondly, the test questionnaire was emailed to Dr Mpolai Moteetee, the Director General for Clinical Services, and Dr Kyaw Thin, the secretary for the Research and Ethics Committee in the Ministry of health and social welfare in Lesotho who approved the validation of the questionnaire. Lastly, the final questionnaire was sent to the Ethics Board at the University of Kwazulu-Natal, and ethical clearance approval was granted.

### 3.5 Analysis of the data

The raw data collected was edited to ensure accuracy, completeness, and consistency with the intended questions; data was recorded and analysed through the use of statistical methods using SPSS (Statistical Package for the Social Sciences), and illustrated in percentages, averages, frequency tables, graphs and cross tabulations.

#### 3.6 Summary

This chapter discussed the research strategies that were used to collect data. It outlined the research design and methodology, research instruments, sampling and sampling techniques used. The usage of these is reflected in the next chapter when presenting and discussing research results.

# **CHAPTER FOUR**

#### **PRESENTATION OF RESULTS**

#### 4.1 INTRODUCTION

This chapter presents the findings on the data obtained from the completed questionnaires administered to Q.E.II hospital employees. The questionnaire consisted of three sections: Section A sought the respondents' demographical data, both section B and C respectively sought their perceptions and expectations on TQM.

The questionnaire items on both the perceptions and expectations sections were based on three fundamental principles of TQ, namely, focus on customers and stakeholders, participation by everyone and teamwork, and process focus supported by continuous improvement. To make the responses more meaningful, the respondents were required to indicate on a 5-point scale, the extent to which they agree or disagree with the given statement. This resulted in five options being strongly agree, agree, uncertain, disagree, or strongly disagree.

#### 4.2 SAMPLE PROFILE

Section A represents the biographical details of the sample. This section attempts to present the respondents' demographics in terms of gender, age, nationality, qualifications, employment category, and length of service. Employment category consists of Accountancy, Administration (Administrators, clerical assistants, hospital assistants, stores assistants, maintenance, and drivers), Clinical (consisting of Doctors, Nurses and Ward Attendants), Human Resource Management, as well as other health professionals such as Pharmacy, Radiology and Laboratory.

The target sample size was two hundred and forty (240) respondents consisting of different job categories in the hospital. All 240 questionnaires were distributed, and one hundred and fifty seven (157) questionnaires were completed and returned resulting in a 65.4% response rate. This response rate was considered large enough to adequately represent the population.

# 4.2.1 Gender

Table 4.1 provides details of the respondents' gender profile. From this table it can be seen that there were 38.2% male respondents and 61.8% female respondents, which signifies a difference of approximately 24% more female than male respondents.

Table 4.1: Respondents' Gender n = 157

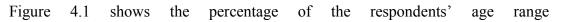
	Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	60	38.2	38.2	38.2
	Female	97	61.8	61.8	100.0
	Total	157	100.0	100.0	

# 4.2.2 Age range in years

Table 4.2 shows the percentage of respondents in each age range. This show that of the 157 respondents, the largest percentage of these (30%) were from the 31-35 age range, while the lowest was 5% in the 46-50 age range.

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25	9	5.7	5.7	5.7
	26-30	13	8.3	8.3	14.0
	31-35	47	29.9	29.9	43.9
	36-40	39	24.8	24.8	68.8
	41-45	32	20.4	20.4	89.2
	46-50	8	5.1	5.1	94.3
	>51	9	5.7	5.7	100.0
	Total	157	100.0	100.0	

Table 4.2: Respondents' Age group n = 157



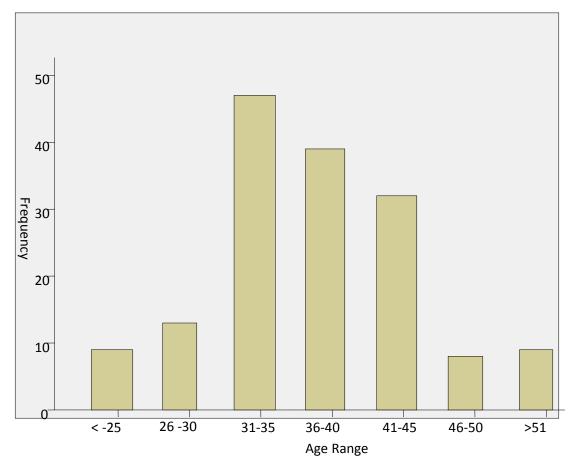


Figure 4.1 Respondents' Age groups

It can be seen in figure 4.1 that the largest number of respondents was in the ages between 31 and 45, with the smallest group being those in the range 46 -50.

# 4.2.3 Nationality

This section details the nationality of respondents in this study.

Table 4.3 shows the nationality of respondents and the respective percentage for each. It shows that majority of the respondents (93.6%) were Basotho, while 5.7% were not Lesotho citizens.

Table 4.3: Respondents' Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mosotho	147	93.6	94.2	94.2
	Other	9	5.7	5.8	100.0
	Total	156	99.4	100.0	
Missin g	System	1	.6		
Total		157	100.0		

# 4.2.4 Highest Level of Education

Table 4.4 provides information in terms of the highest level of education of respondents

Table 4.4: Respondents' Highest level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Std 7	9	5.7	5.8	5.8
	J.C.	21	13.4	13.5	19.2
	C.OS.C.	35	22.3	22.4	41.7
	Certificate	20	12.7	12.8	54.5
	Diploma	44	28.0	28.2	82.7
	Degree	23	14.6	14.7	97.4
	Other	4	2.5	2.6	100.0
	Total	156	99.4	100.0	
Missing	System	1	.6		
Total		157	100.0		

Table 4.4 shows that the majority of the respondents (28.2%) have a diploma followed by 22.4% who hold a C.O.S.C., and the minority of them (2.6%) holds ,,other' post-graduate qualifications, as their highest qualification. Figure 4.2 shows this information in graphical format.

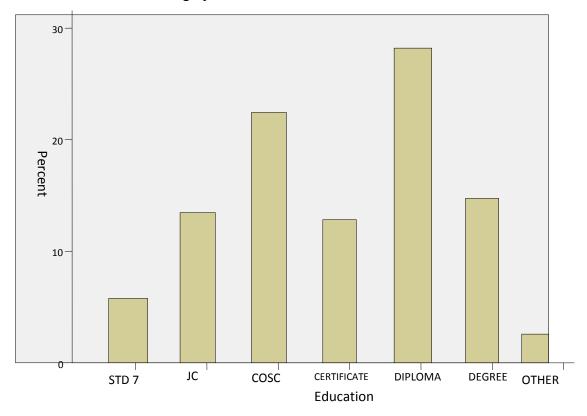


Figure 4.2: Respondents' highest level of education

From figure 4.2 it can be seen the highest education level of the majority of respondents is a diploma (28.2%), followed by COSC (22.4%), then a degree (14.7%).

# 4.2.5 Respondents' category of employment

Table 4.5 provides the frequencies of the spread of employment category of respondents.

Employ	ment Category	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accountancy	6	3.8	3.8	3.8
	Administration	53	33.8	33.8	37.6
	Clinical	84	53.5	53.5	91.1
	Human Resources	1	.6	.6	91.7
	Other	13	8.3	8.3	100.0
	Total	157	100.0	100.0	

Table 4.5: Category of Employment

Figure 4.3 provides the employment category detail in graphical format.

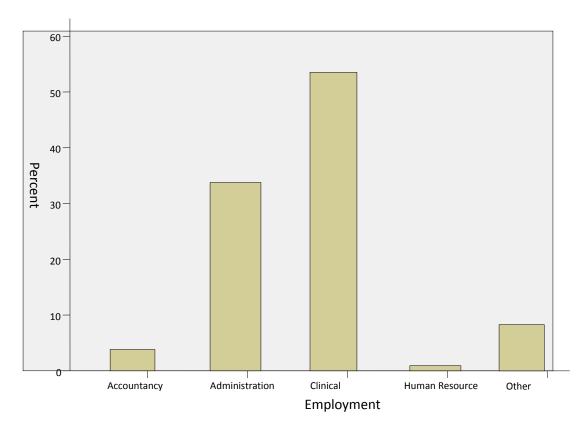


Figure 4.3: Employment category

Table 4.5 and Figure 4.3 show that the largest group of respondents was in clinical service consisting of nurses and doctors (53.5%) followed by administration (33.8%). The smallest group was from human resource (0.6%). The number of respondents in the "other' health professional category, such as pharmacy and radiology was 8.3%.

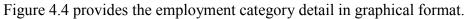
## 4.2.6 Length of service in the hospital

This section presents the results on length of service of respondents:

Number of years	Frequency	Percent	Valid Percent	Cumulative Percent
Valid <1	7	4.5	4.5	4.5
1-5	50	31.8	31.8	36.3
6-10	44	28.0	28.0	64.3
11-15	27	17.2	17.2	81.5
16-20	27	17.2	17.2	98.7
>20	2	1.3	1.3	100.0
Total	157	100.0	100.0	

Table 4.6: Length of service in the hospital

It is shown in table 4.6 that the largest percentage (31.8%) served the hospital for the period of 1-5 years, followed by 28% that served 6-10 years. The lowest percentage of respondents (1.3%) served the hospital for over 20 years.



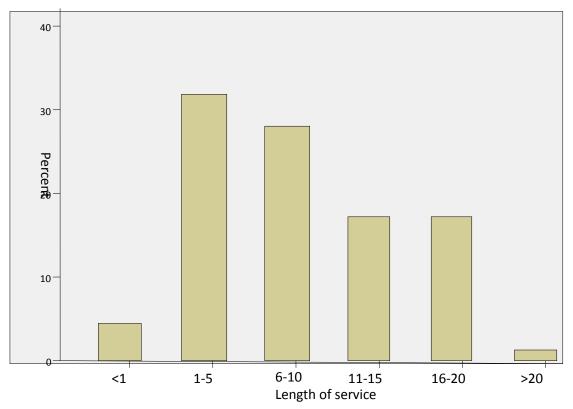


Figure 4.4: Length of service in the hospital

From figure 4.4 it is shown that more than half of the respondents have served only up to 10 years. This was followed by 17.2% in both categories 11-15 years and 16-20 years. The smaller percentages were 4.5% and 1.3% of respondents who have been employed in the hospital for less than one year (<1) and more than twenty years (>20), respectively.

#### 4.3 EMPLOYEE PERCEPTIONS

Employee perceptions are an important factor determining service quality as Ramseook-Munhurrun et al (2009) state that satisfied employees are committed to continuous improvement, and are more likely to be committed to delivering quality service.

Section B of the questionnaire sought the employees' perceptions about TQM at Q.E II Hospital, and the findings are presented below.

## 4.3.1 **Perceptions - Focus on stakeholders**

The results to the statements regarding the focus on stakeholders are presented in Table 4.7 and discussed in the following section.

#### Employees understand the hospital's objectives

The majority of respondents believe they understand the hospital objectives with over 50% of the respondents who agree (30.6%) and strongly agree (23.6%) with the statement. There were 19% of respondents who strongly disagree and 18.5% disagree that they understand the hospital's objectives. The group that indicated they were not sure (uncertain) whether they know the objectives or not, was just 5.7% of the respondents.

Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	total	missing
	%	%	%	%	%	%	%
Employees understand hospital objectives	19.1	18.5	5.7	30.6	23.6	97.5	2.5
Objectives communicated to employees	38.9	28	4.5	17.8	8.9	98.1	1.9
Management is sensitive to employee needs	43.3	25.5	3.8	19.1	5.7	97.5	2.5
Supervisor is supportive	10.2	7.0	4.5	57.3	19.7	98.7	1.3
Supervisor recognizes employee performance	8.9	10.2	7.0	53.5	20.4	100	0
Employee performance is appraised	23.6	3.8	7.0	51.0	11.5	96.8	3.2
Employee is rewarded for performance	86.6	10.8	1.9	0.6	0	100	0
Work environment is conducive	29.9	46.1	2.6	18.2	2.6	100	0
Employees are provided with adequate resources	27.4	45.2	4.5	21.0	1.9	100	0
Equipment is in good condition	38.2	49.0	8.9	3.2	0.6	100	0
Management understand employee training needs	46.5	19.7	8.3	20.4	2.5	97.5	2.5
Employees are trained	45.2	28.0	7.0	14.6	4.5	99.4	0.6
Management understand patients' needs	31.8	10.2	27.4	17.2	12.1	98.7	1.3
Management seek feedback from patients	57.3	11.5	19.1	9.6	1.9	100	0

Table 4.7: Perceptions: Focus on and stakeholders

# The hospital objectives are communicated to employees

The results in Table 4.7 show a large percentage of the respondents feel that the hospital's objectives are not communicated to them as 38.9% of the respondents strongly disagree, and 28% disagree with the statement. There were 17.8% of respondents who agreed with the statement, whilst 8.9% strongly agree that the objectives are communicated to them. There were 4.5% of respondents who are

not sure whether the objectives are communicated to them or not and 1.9% of respondents did not answer this question.

#### Hospital management is sensitive to employees' needs

The results in Table 4.7 show the majority of the respondents feel that the hospital's management is not sensitive to employees' needs, with 43.3% who strongly disagreed and 25.5% who disagree with the statement – total 68.8%. There were 3.8% of the respondents who are "uncertain, whilst 19.1% and 5.7% agree and strongly agree, respectively with the statement. There were 4.5% of respondents who are uncertain with the statement and 2.5% who did not respond.

#### Supervisor is supportive

The results in Table 4.7 show a large percentage of the respondents (57.3%) agree that their supervisors are supportive. It is followed by 19.7% of respondents who strongly agree with the statement. Those respondents who are uncertain were 4.5%, whilst 7% disagree and 10.2% strongly disagree that their supervisors are supportive.

## Supervisor recognizes performance

From the results in Table 4.7 it may be seen that the largest percentage of the respondents feel that their supervisors recognize their performance. This is reflected by 53.5% who agree and 20.4% who strongly agree with the statement. There was a group of 7% who indicated they are uncertain. Those who disagreed were 10.2% and 8.9% of the respondents who strongly disagree with the statement.

#### **Employee Performance is appraised**

The results in Table 4.7 show that 51% of the respondents agree and 11.5% strongly agree that their performance is appraised. Those who strongly disagree were 23.6% of respondents with 3.8% who disagree with the statement. There were 7% of the respondents who are not sure (uncertain) whether their performance is appraised or not.

## Employees are rewarded for good performance

From the results shown in Table 4.7, it can be seen that the majority of the respondents feel that they are not rewarded for performance as 86.6% strongly disagree and 10.8% disagree with the statement, with 1.9% who are uncertain. None of the respondents strongly agree that their performance is rewarded, with just 0.6% who agree.

#### Work environment is conducive

From the results in Table 4.7 it is shown that a large percentage of the respondents (46.1%) disagree with the statement. This is followed by 29.9% who strongly disagree that the work environment is conducive. There are 2.6% who are uncertain. There were only 18.2% of respondents who agree and 2.6% who strongly agree.

#### **Employees are provided with adequate resources**

The results in Table 4.7 show that the majority of the respondents feel that they are not provided with adequate resources to perform their duties. This is reflected from 45.2% of respondents who disagree and 27. 4% who strongly disagree with the statement. There were 4.5% of respondents who are uncertain, whilst 21% agree and only 1.9% strongly agree.

#### Equipment is in good condition

From the results in Table 4.7, it is shown that almost 90% of the respondents feel that the equipment they use is not in good condition. There were 49% who disagree and 38.2% who strongly disagree with the statement. Whilst only 3.2% of respondents agree and just 0.6% strongly agree, with 8.9% of the respondents is not sure about the condition of the equipment they use.

#### Management understand employee training needs

It is shown from the results in Table 4.7 that 46.5% of the respondents strongly disagree with this statement and 19.5% disagree. There were 8.3% of respondents who are not sure if management understands their needs. Only 20.4% agreed, and 2.5% strongly agreed that the hospital management understands their training needs.

#### Employees' skills are improved through training courses

A large percentage of the respondents feel that employees are not given an opportunity to attend training courses and workshops as 45.2% strongly disagree and 28% disagree with the statement. 14.6 % agree whilst 4.5% strongly agree that employees get opportunity to go on training. 7% of the respondents are not sure (uncertain).

#### Management understands patients' healthcare needs

Almost half of the respondents feel that management do not understand the needs of the patients as 31.8%strongly disagree and 10.2% disagree with the statement. 27.4% are uncertain. 17.2%) agree and 12.1% strongly agree with the statement.

#### Management seek feedback from patients about the service provided

It is shown from the results in table 4.7 that 57.3% strongly disagree and 11.5% disagrees with the statement. 19.1% of the respondents are not sure if management seeks feedback from patients. 9.6% agree whilst 1.9% of the respondents strongly agree.

## 4.3.2 **Perceptions: Participation by everyone and teamwork**

According to Oackland and Porter (1994) cited in Hoogervorst and Van der Flier (2005) employee involvement in decision making is an important element of TQ because the true responsibility for quality lies with the person or group actually doing the job.

The employees' perceptions regarding their participation in decision making and teamwork are presented on table 4.3.2 and discussed below.

#### There is a clear communication channel within the hospital

The results in table 4.8 show that 29.3% strongly disagree and14% disagree with the above statement. 8.3% are not sure (uncertain) if communication channels are clear. 26.8% and 21.7% strongly agree.

## Information flows from top management to employees

Table 4.8 shows that a large percentage of respondents (38.9%) strongly agree with the statement. This is followed by 35.7% who strongly disagree. 10.2% of the respondents disagree with the statement. 8.3% are not sure, whilst 7% of the respondents agree that information flows from the top down to employees.

	Strongly	Disagree	Uncertain	Agree	Strongly	total	missing
	disagree				agree		
	%	%	%	%	%	%	%
	29.3%	14.0%	8.3%	26.8	21.7%	100%	0%
Communication				%			
channels							
Information	35.7%	10.2%	8.3%	7.0%	38.9%	100%	0%
flows from							
management to							
employees							
	64.3%	17.2%	9.6%	7.6%	1.3%	100%	0%
flows from							
management							
and employees							
	60.5%	24,8%	4.5%	5.7%	3.2%	98.7	1.3%
decision-		,				%	
making							
Employees	49.0%	33.1%	7.6%	5.7%	1.3%	96.8	3.2%
present their						%	
views regarding							
their job							
Employees are	51.0%	31.8	5.7%	10.2	1.3%	100%	0%
informed about				%			
management							
decisions							
Management	23.6%	28.0%	5.7%	36.4	6.4%	100%	0%
encourage team				%			
work							
	21.7%	26.8%	7.6%	31.2	11.5%	98.7	1.3%
build strong		/*		%		%	
work teams							
Employees	8.9%	8.9%	4.5%	49.7	28.0%	100%	0%
work as a team				%			
Employees	7.0%	9.6%	8.3%	51.6	23.6%	100%	0%
share resources				%			

Table 4.8: Perceptions: Participation by everyone and team work

# Information flows both from top management and employees

Majority of the respondents feel that the information does not flow both from management and employees as 64.2% strongly disagree and 17.2%) disagree with the statement. 9.6% of the respondents are not sure (uncertain). 7.6% agree and 1.3% strongly agree that information flows both from management and employees.

#### Employees get involved in decision making

Table 4.8 shows that 60.5% strongly disagree and 24.8% disagree with the statement. 4.5% of the respondents maintained a neutral opinion (uncertain), whilst 5.7% and 3.2% respectively, agreed and strongly agreed that employees get involved in decision-making.

#### Employees present their views regarding their job

The results in table 4.8 reveal that almost half of the respondents (49%) strongly disagree with the statement and 33.1% disagree. 7.6% are not sure about that. 5.7% agree and 1.3% strongly agree with the statement.

#### Employees are informed about management decisions

Table 4.8 show that80% of the respondents feel that employees are not informed about management decisions as 51% strongly disagree and 31.8% disagree with the statement. 5.7% are not sure, whilst 10.2% agree and 1.3% strongly agree that employees are informed about the decisions made by management.

## Management encourage team work

A large percentage of the respondents (36.4%) agree with the above statement. This is followed by 28%) and 23.6% respectively that strongly disagree and agree that management encourage teamwork. 6.4% strongly agree with the statement, while 5.7% are not sure.

#### Management builds strong work teams

The results in table 4.8 illustrate that 31.2% agree with the above statement. 26.8% disagree and 21.7% strongly disagree with the statement. 7.6% are not sure, and 11.5% agree with the statement.

### Employees work as a team

Majority of the respondents feel that the employees work as a team as 49.7% agree and 28% of the respondents strongly agree with the statement. 4.5% are not sure, and 8.9% respectively disagree and strongly disagree.

## **Employees share resources**

It is shown in table 4.8 that approximately 80% of the respondents feel that employees share resources as 51.6% agree and 23.6% strongly agree with the statement. 8.3% are not sure. 9.6% disagree and 7% of the respondents disagree with the above statement.

# 4.3.3 Perceptions: process focus and continuous improvement

According to Mohanty (2008) process focus in healthcare involves setting and defining minimum quality standards, development and monitoring of collaborative care plan, and adopting accreditation systems that help in the development of clinical and professional practice, and help the entire health institution to improve its internal management and service delivery.

The employees' perceptions regarding process focus and continuous improvement in the hospital are presented on table 4.9 and discussed below.

Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Total	Missing
	%	%	%	%	%	%	%
Healthcare standards are in place in the hospital	19.7	26.1	29.3	19.7	4.5	99.4	0.6
Management ensures that all employees know healthcare standards	35.7	28.7	17.8	14.6	3.2	100	0
Management monitors healthcare standards and procedures	32.5	26.8	33.1	5.1	1.9	99.4	0.6
The hospital has a collaborative care plan	26.8	26.8	40.1	5.1	0.6	100	0
Management ensures process integration	25.5	41.4	17.2	12.7	2.5	99.4	0.6
Work flows well between departments	32.5	28	8.9	27.4	3.2	100	0
Employees understand hospital processes	32.5	19.7	7	28	12.7	100	0
Processes are regularly reviewed	62.4	10.8	5.7	12.7	6.4	98.1	1.9
Processes are continuously improved	54.1	6.4	10.2	13.4	13.4	97.5	2.5

Table 4.9 Perceptions: Process focus supported by continuous improvement

# Health standards are in place in the hospital

Table 4.9 above shows that majority of the respondents (29.3%) are not sure if health standards are in place in the hospital. It is followed by 26.1% who disagree with the statement. 19.7% respectively agree and strongly disagree, whilst 4.5% strongly agree with the statement.

#### Management ensures that all employees know healthcare standards

The results in table 4.9 show that 35.7% strongly disagree and 28.7% disagree with the statement. 17.8% are not sure, whilst 14.6% agree and 3.2% strongly agree with the statement.

#### Management monitors compliance with healthcare standards and procedures

Table 4.9 shows that majority of the respondents (33.1%) are not sure if management monitors healthcare standards. 32.5% strongly disagree and 26.8% disagree with the statement. 5.1% agree and 1.9% or respondents strongly agree.

#### The hospital has a collaborative care plan

It is shown on table 4.9 that 40.1% of the respondents are not sure if a collaborative care plan exists in the hospital. 26.8% respectively disagree and strongly disagree. 5.1% agree and 0.6% strongly agree.

#### Management ensures process integration in the hospital

Approximately 70% of the respondents feel that management does not ensure process integration as 41.4% disagree and 25.5% strongly disagree with the statement. 17.2% are not sure. 12.7% agree and 2.5% strongly agree with the statement.

#### Work flows well between departments

Table 4.9 shows that majority of the respondents (32.5%) strongly disagree and (28%) disagree with the statement that work flows well between hospital departments 27.4% agree and 3.2% strongly agree. 8.9% are not sure.

### **Employees understand hospital processes**

A largest percentage (32.5%) of respondents strongly disagrees that employees understand hospital processes. This is followed by 28% who agree. 19.7% strongly disagree whilst 12.7% strongly agree. 7% were neutral (Uncertain).

## Hospital processes are regularly reviewed

It is shown in table 4.9 that majority of respondents (62.4%) strongly disagree and 10.8% disagree. 12.7% agree and 6.4% strongly agree. 5.7% are not sure.

## Hospital processes are continuously improved

The results from table 4.9 show that 54.1% strongly disagree and 6.4% disagree with the statement. 10.2% is not sure, whilst 13.4% respectively agree and strongly agree with the statement.

#### 4.4 EMPLOYEE EXPECTATIONS

Zeithml et al (2009) define expectations as the beliefs about the level of service that is anticipated to be delivered by the service provider, and they are regarded as standards or reference points through which service performance is measured. Section C of the questionnaire sought the employees' expectation on TQM to be implemented in the new PPP referral Hospital, and the findings are presented below.

#### 4.4.1 Expectations – focus on customers and stakeholders

Employees' expectations regarding focus on customers and stakeholders are presented in table 4.10 and discussed in the next section.

Statements	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Total	Missing
Employees will understand objectives	% 8.9	% 3.8	% 14.0	% 28.7	% 41.4	% 96.8	% 3.2
Objectives will be communicated	7.0	2.5	21.0	38.2	28.0	96.8	3.2
Management will be sensitive to employee needs	6.4	4.5	17.2	43.3	22.9	94.3	5.7
Supervisors will be supportive	9.6	5.7	15.9	37.6	25.2	94.3	5.7
Supervisors will recognize employee performance	4.5	0.6	17.8	45.9	24.8	93.6	6.4
Performance will be appraised	7.0	0	24.2	32.5	30.6	94.3	5.7
Employees will be rewarded	12.7	5.7	31.8	18.5	24.8	93.6	6.4
Work environment will be conducive	5.1	0.6	17.2	24.2	45.9	93.0	7.0
Employees will get adequate resources	5.1	2.5	8.9	37.6	40.1	94.3	5.7
Equipment will be in good condition	5.7	1.3	14.0	41.4	31.8	94.3	5.7
Management will understand employee training needs	5.7	1.9	24.8	40.1	21.0	93.6	6.4
Employees will be trained	5.7	3.8	19.7	40.8	22.9	93.0	7.0
Management will understand patients' needs	9.6	0	24.2	27.4	31.8	93.0	7.0
Management will seek patients' views	14.0	0	38.2	23.6	19.7	95.5	4.5

Table 4.10: Expectations: Focus on customers and stakeholders

#### Employees will understand hospital objectives

Table 4.10 shows that majority of respondents (41.4%) strongly agree, and 28.7% agree that employees will understand hospital objectives in the new PPP referral hospital. 14% are not sure (Uncertain). 3.8% disagree and 8.9% strongly disagree with the above statement.

#### **Objectives will be communicated to employees**

The results in table 4.10 reveal that 38.2% agree and 28%) strongly agree with the statement. 21% is uncertain. 2.5% disagree and7% strongly disagree with the statement.

## Management will be sensitive to employee needs

It is shown in the results in table 4.10 that a large percentage of the respondents (43.3%) agree and 22.9% strongly agree with the statement. 17.2% are not sure. 6.4% strongly disagree and 4.5% disagree.

#### Supervisor will be supportive

Table 4.10 shows that 37.6% agree and 25.2% strongly agree that supervisors will be supportive. 15.9% of the respondents are not sure if their supervisor will be supportive. 5.7% disagree and 9.6% strongly disagree with the statement.

## Supervisors will recognize employees' performance

The results presented in table 4.10 reveal that majority of the respondents (45.9%) agree with the statement, and it is followed by 24.8% who strongly agree. 17.8% are not sure. 0.6% disagree and 4.5% strongly disagree.

#### **Employee performance will be appraised**

Table 4.10 reveals that more than 60% of the respondents feel that their performance will be appraised. This is reflected by 32.5% that agree and 30.6%

that strongly agree with the statement. 24.2% are not sure. There are no respondents who disagree (0%), and 7% strongly disagree.

#### Employees will be rewarded for good performance

As shown in table 4.10, a large percentage of the respondents (31.8%) are not sure if they will be rewarded for good performance. This is followed by 24.8% that agree and 18.5% who strongly agree. 5.7% disagree and 12.7% strongly disagree.

#### Work environment will be conducive

The results presented in table 4.10 show that 45.9% strongly agree and 24.2% agree with the statement that work environment will be conducive. 17.2% is not sure. 0.6% disagree and 5.1% strongly disagree.

## Employees will be provided with adequate resources

It is shown in table 4.10 that40.1% strongly agree and 37.6% agree that employees will be provided with adequate resources. 8.9% are not sure whilst 2.5% disagree and 5.1% strongly disagree.

#### Equipment will be in good condition

The results in table 4.10 reveal that41.4% agree and 31.8% strongly agree that equipment will be in good condition in the new PPP referral hospital. 14% are not sure. 1.3% disagrees and 5.7% strongly disagree.

#### Management will understand employees' training needs

Table 4.10 show that40.1% agree and 21% strongly agree that management will understand their training needs. 24.8% are not sure, whilst 1.9% disagree and 5.7% strongly disagree with the above statement.

## **Employees will be trained**

It is shown in table 4.10 that40.8% agree and 22.9% strongly agree. 19.7% are not sure. 3.8% disagree and 5.7% strongly disagree.

## Management will understand patients' healthcare needs

The results shown in table 4.10 reveal that a large percentage of respondents (31.8%) strongly agree with the statement that management will understand patients' healthcare needs. 27.4% agree, and it is followed by 24.2% that are not sure. No respondents disagree while 9.6% strongly disagree with the above statement.

## Management will seek feedback from patients regarding service provided

It is shown in table 4.10 that majority of respondents (38.2%) are not sure if management will seek feedback from patients regarding services provided. 23.6% agree and 19.7% strongly agree with the statement. None of the respondents disagree, and 14% strongly disagree.

# 4.4.2 Expectations: Participation by Everyone and Teamwork

The employees' expectations regarding participation by everyone and teamwork are shown in table 4.11 and discussed below.

## There will be clear communication channels

Table 4.11 shows that more than half of the respondents (51%) strongly agree with the above statement. This is followed by 19.1% that agree. 15.3% is uncertain whilst 8.3% strongly disagree and (1.3%) agree with the statement.

Statements	Strongly	Disagree	Uncertai	Agree	Strongly	Total	Missing
	disagree	<b>0</b> (	n	0 (	agree	0 /	0.(
	%	%	0 /	%	%	%	%
TT1 '11 1		1.0	%	10.1	51.0	05.5	4.5
There will be	8.9	1.3	15.3	19.1	51.0	95.5	4.5
clear							
communication							
channels			• • • •	1.5.0			
Information will	5.7	8.3	28.7	15,3	37.6	95.5	4.5
flow from							
management to							
employees							
Information will	10.8	20.4	36.9	19.1	8.3	95.5	4.5
flow from							
management and							
employees							
Employees will	14.0	26.1	23.6	21.7	9.6	94.9	5.1
get involved in							
decision-making							
Employees will	7.9	22.9	22.9	31.8	10.2	95.5	4.5
present their							
views regarding							
their job							
Employees will	5.1	14.6	21.7	40.1	12.7	94.3	5.7
be informed							
about							
management							
decisions							
Management will	1.9	5.1	16.6	47.8	23.6	94.9	5.1
encourage team							
work							
Management will	2.5	1.3	14.0	49.7	27.4	94.9	5.1
build strong work							
teams							
Employees will	2.0	1.9	13.4	41.4	34.4	94.9	5.1
	3.8	1.9	13.4	41.4	54.4	94.9	5.1
work as a team	2.0	0	14.0	22.5	15.0	05.5	1.5
Employees will	3.8	0	14.0	32.5	45.2	95.5	4.5
share resources							

Table 4.11: Expectations: Participation by everyone and teamwork

# Information will flow from management to employees

The results in table 4.11 show that 37.6% strongly agree and 15.3% agree with the above statement. 28.7% are not sure if information will flow from management to employees. 8.3% disagree and 5.7% strongly disagree with the above statement.

#### Information will flow from management and employees

Table 4.11 shows that a large percentage of the respondents (36.9%) are not sure if information will flow both from management and employees. This is followed by 20.4% who disagree and 10.8% who strongly disagree with the statement. 19.1% agree and 8.3% strongly agree with the statement.

#### Employees will get involved in decision-making

It is shown in table 4.11 that 26.1% of the respondents disagree with the statement that employees will get involved indecision-making. It is followed by 23.6% who are not sure. 21.7% agree and 9.6% strongly agree. 14% strongly disagree with the above statement.

## Employees will present their views about their job

The results presented in table 4.11 show that 31.8% agree with the statement. 22.9% are not sure. Another 22.9% disagree and 7.9% strongly disagree. 10.2% strongly agree.

## Employees will be informed about management decision

The results show that a large percentage of respondents (40.1%) agree and 21.7% are not sure. 14.6% disagree and 5.1% strongly disagree whilst 12.7% strongly agree.

#### Management will encourage team work

It is shown in table 4.11 that 47.8% agree and 23.6% strongly agree that management will encourage team work. 16.6% of the respondents are uncertain whilst 5.1% disagree and 9.1% strongly disagree with the statement.

#### Management will build strong work teams

The results presented in table 4.11 show that most of the respondents (47.9%) agree and (27.4%) strongly agree that management will build strong work teams. 14% are not sure. The smallest percentage (1.3%) disagrees whilst (2.5%) strongly disagrees with the statement.

#### Employees will work as a team

Table 4.11 shows that majority of the respondents (41.4%) agree and (34.4%) strongly agree that employees will work as a team. 13.4% are not sure. 1.9% disagree and 3.8% strongly disagree.

#### **Employees will share resources**

It is shown from the results in table 4.11 that more than 80% of the respondents feel that employees will share resources as 45.2% strongly agree and 32.5% agree with the statement. 14% are not sure. None of the respondents (0%) disagree and 3.8% strongly disagree with the statement.

## 4.4.3 Expectations: process focus and continuous improvement

The respondents' expectations with regard to process focus and continuous improvement are presented in table 4.12 and discussed below.

## Healthcare standards will be in place

The results presented in table 4.12 show that 43.3% of the respondents agree and 35% strongly agree that healthcare standards will be in place in the new PPP referral hospital. 12.1% are not sure. 1.9% respectively disagrees and strongly disagrees with the statement

Statements	Strongly	Disagree	Uncertai	Agree	Strongly	TOTA	MISSIN
	disagree	-	n	-	agree	L	G
	%	%		%	%		
			%			%	%
Healthcare	1.9	1.9	12.1	43.3	35.0	94.3	5.7
standards will be in							
place in the hospital							
Management will	3.2	3.8	16.6	45.9	24.8	94.3	5.7
ensure that all							
employees know							
healthcare standards							
Management will	3.2	3.8	14.0	39.5	31.8	92.4	7.6
monitor compliance							
with healthcare							
standards and							
procedures							
The hospital will	2.5	2.5	13.4	47.8	25.5	91.7	8.3
have a collaborative							
care plan							
Management will	3.2	1.3	16.6	41.4	29.9	92.4	7.6
ensure process							
integration							
Work will flow	3.2	3.8	21.0	35.7	28.7	92.4	7.6
well between							
departments							
Employees will	4.5	5.7	11.5	38.2	31.8	91.7	8.3
understand hospital							
processes							
Processes will be	2.5	7.6	14.6	36.3	28.0	89.2	10.8
Processes will be	3.2	6.4	15.3	38.9	26.1	89.8	10.2
continuously							
improved							
continuously	3.2		15.3	38.9	26.1	89.8	10.2

Table 4.12: Expectations: Process focus and continuous improvement

# Management will ensure that all employees know healthcare standards

Table 4.12 reveals that a large percentage of respondents (45.9%) agree and 24.8% strongly agree with the statement. 16.6% are not sure. Three point two percent (3.2%) strongly disagree whilst 3.8% disagree.

# Management will monitor compliance with healthcare standards and procedures

Table 4.12 shows that 39.5% agree and 31.8% strongly agree that compliance with healthcare standards and procedures will be monitored. 14% are not sure. 3.8% disagree whilst (3.2%) strongly disagree.

### The hospital will have a collaborative healthcare plan

It is shown in table 4.12 that majority of the respondents (47.8%) agree that the hospital will have a collaborative healthcare plan. This is followed by 25.5% that strongly agree with the statement. 13.4% are uncertain. The lowest percentage is 2.5% that respectively disagree and strongly disagree with the above statement.

#### Management will ensure process integration

Table 4.12 shows that 41.4% agree and 29.9% strongly agree with the statement. 16.6% of respondents maintained neutral opinion (uncertain). 1,3% disagree and 3,2% strongly disagree with the statement.

#### Work will flow well between departments

The results presented in table 4.12 show that 35.7% of the respondents agree and 28.7% strongly agree with the above statements. 21% are not sure if work will flow well between the departments. 3.8% disagree and 3.2% strongly disagree.

#### **Employees will understand hospital processes**

Table 4.12 shows that approximately 70% of the respondents feel that employees will understand the hospital processes as 38.2% agree and 31.8% strongly agree with the statement. 11.5% of the respondents are uncertain. 5.7% disagree and 4.5% strongly disagree with the statement.

#### Processes will be regularly reviewed

The results from table 4.12 reveal that 36.3% agree and 28% strongly agree that processes will be regularly reviewed. 14.6% are not sure. 7.6% disagree and 2.5% strongly disagree.

## Processes will be continuously improved

It is shown in table 4.12 that 38.9% agree and 26.1% strongly agree that hospital processes will be continuously improved. 15.3% of the respondents is not sure; whilst 6.4% disagree and 3.2% strongly disagree with the above statement.

# **4.5 GAP ANALYSIS**

The gaps that arise from service delivery are the key determinants of customer satisfaction or dissatisfaction. Zeithaml et al (2009) state that customer gap occurs between customers' expectations that they bring into the service experience, and the perceptions assessment of actual service experience. Several authors assert that the most important gap is Gap 5 which is the difference between customers' expectations and perceived service quality (Douglas & Connor, 2003; Deshmuk & Vrat, 2005; Rashid & Yusoff, 2009; Zeithaml et al, 2009).

An analysis is conducted to assess Gap 5 between the employees' perceptions and expectations of TQM. This is done by calculating the mean of the Likert scale scores for the two groups (perceptions and expectations) for each of the TQ principles: stakeholders, participation and process focus.

The gap for each statement and an overall average gap scores for each of the three segments were obtained by calculating the difference between employees' perceptions and expectations of TQM for each statement and each principle of TQ.

The data in relation to gap 5 that exists between the employees' perceptions and their expectations of TQM is presented on the tables and graphs below.

## 4.5.1 Gap analysis: Focus on customers and stakeholders

Table 4.13 presents the mean scores for Perceptions and Expectations and the gap scores for each statement in relation to focus on customers and stakeholders.

Statements	Perceptions (P)	Expectations (E)	Difference
	(mean)	(Mean)	P-E
Objectives	3.22	3.93	-0.71
Communication	2.29	3.80	-1.51
Sensitivity	2.16	3.76	-1.6
Supervisor support	3.70	3.68	0.02
performance recognition	3.66	3.92	-0.26
Performance appraisal	3.24	3.84	-0.6
Rewards	1.17	3.39	-2.22
Environment	2.16	4.13	-1.97
Provision of resources	2.25	4.11	-1.86
Equipment condition	1.79	3.98	-2.19
Training needs	2.10	3.73	-1.63
Training courses	2.04	3.77	-1.73
Patients' needs	2.67	3.77	-1.1
Feedback from patients	1.87	3.37	-1.5
Average	2.45	3.83	-1.38

Table 4.13: Gap 5: Focus on customers and stakeholders

As can be seen from data in Table 4.13, the highest statement gap score was -2.22. This was the difference between perception score and expectation score for the statement which states that employees are rewarded for good performance. The lowest statement gap score of 0.02 was based on the statement which states that "my supervisor is supportive". The results show that only one statement in the focus on customers and stakeholders segment achieved a positive gap score, while all other statements obtained negative scores. This principle also obtained an overall gap score of -1.38.

Figure 4.5 presents the above data in graphical form.

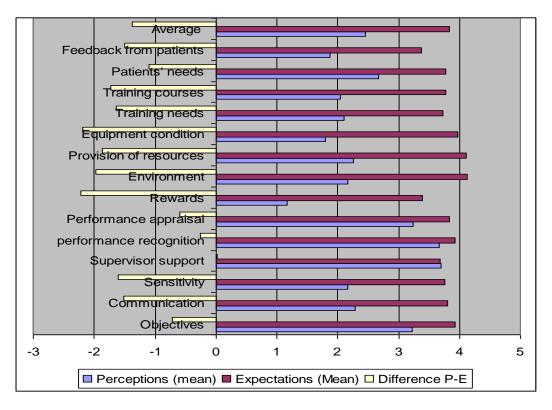


Figure 4.5: Gap analysis: focus on customers and stakeholders

In Figure 4.5 it is clearly shown that the expectations scores are by far higher than the perception scores, with just one with a very small positive score. The differences between perceptions and expectations are also depicted.

## 4.5.2 Gap analysis: Participation by everyone and teamwork

Table 4.14 presents the mean scores for each statement and gap scores that exist between employees' perceptions and expectations with regard to participation by everyone and teamwork.

Statements	Perceptions	Expectations	Difference
	(Mean)	(Mean)	P-E
Communication channels	2.97	4.07	-1.1
Top-down information flow	3.03	3.74	-0.71
Cross information flow	1.64	2.93	-1.29
Involvement in decision-making	1.65	2.86	-1.29
Employees' views	1.73	3.15	-1.42
decisions regarding employees	1.75	3.43	-1.17
Teamwork encouraged	2.74	3.91	-1.17
Building strong teams	2.84	4.03	-1.19
Teamwork	3.79	4.06	-0.27
Sharing resources	3.75	4.21	-0.46
Average	2.59	3.64	-1.05

 Table 4.14: Gap analysis:
 Participation by everyone and teamwork

Table 4.14 shows that the highest statement gap score for participation by everyone and teamwork was -1.42. This score was the difference between employees' perceptions and expectations for the statement which states that "employees present their views regarding their job". The lowest statement gap score for this principle of TQ was -0.27. This was for the statement which states, "My colleagues and I work as a team".

All the statements in the "participation by everyone and teamwork' principles received negative gap scores between perceptions and expectations, and this led to an overall gap score of -1.05.

The above data is presented on a graphical form in Figure 4.6 below.

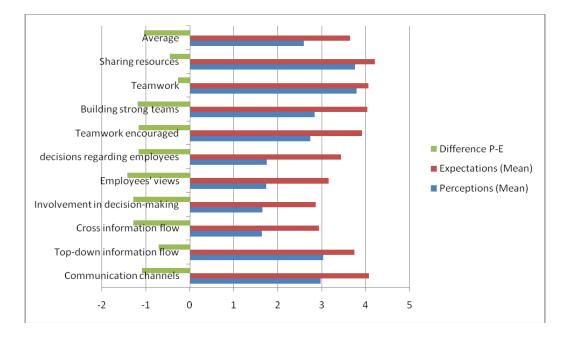


Figure 4.6: Gap analysis: participation by everyone and teamwork

It is clearly shown in figure 4.6 that expectations scores far exceed the perceptions scores for the participation by everyone and teamwork principle. Figure 4.6 also depict the gap s cores for each st atement of this principle, which represent the difference between employee perceptions and expectations of TQM.

#### 4.5.3 Gap analysis: Process focus and continuous improvement

Table 4.15 below presents the mean scores and the gap scores for each statement in relation to process focus and continuous improvement principle of TQ. It shows that the highest gap score for the process focus and continuous improvement principle of TQ was -2.01 which was for the statement which states that "hospital processes are reviewed regularly". The lowest statement gap score was -1.49, which was the difference between perceptions score and expectations score for the statement which states that "work flows well between departments".

The process focus and continuous improvement principle had the negative gap scores in all statements, and a negative overall gap score of -1.65.

Statements	Perceptions	Expectations	Difference
	(Mean)	(Mean)	P-E
Healthcare standards	2.63	4.14	-1.51
Ensuring knowledge of health standards	2.21	3.91	-1.7
Monitoring	2.17	4.01	-1.84
Collaborative healthcare plan	2.26	3.99	-1.73
Process integration ensured	2.25	4.01	-1.76
Work flow between departments	2.41	3.90	-1.49
Understanding hospital processes	2.69	3.95	-1.26
Regular process review	1.88	3.89	-2.01
Continuous process improvement	2.25	3.87	-1.62
Average	2.31	3.96	-1.65

Table 4.15: Process focus and continuous improvement

The above data is presented graphically in figure 4.7 below:

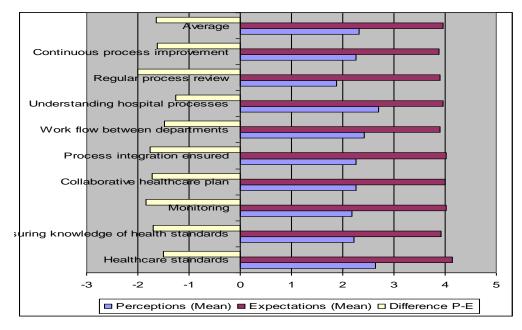


Figure 4.7: Gap analysis: process focus and continuous improvement

It can be seen from figure 4.7 that employees' expectations are far higher than their perceptions in relation to process focus and continuous improvement principle of TQ. Figure 4.7 also shows that an overall gap score for this segment is a negative, which represents the difference between overall perceptions mean scores and expectations mean scores.

# 4.6 THE TOTAL QUALITY INDEX

The TQ index establishes an overall average of the gap scores for the three fundamental principles of TQ. An analysis is conducted to assess an average gap score between the employees' perceptions and expectations on each fundamental principle of TQ. This was done by computing the difference between the average perception gap scores and average expectation gap scores for each principle.

Table 4.16 shows that an overall average gap score for the three fundamental principles is -1.36, which represents the difference between an overall gap score for perceptions and overall gap score for expectations. It also reveals that the process focus and continuous improvement had the highest average gap score of - 1.65, while focus on customers and stakeholders got the middle gap score of -1.38. The lowest gap score of -1.05 was for participation by everyone and teamwork principle.

Table 4.16: TQ INDEX

TQ PRINCIPLES	AVERAGE	AVERAGE	AVERAGE
	PERCEPTIONS	EXPECTATIONS	GAP SCORES
Focus on customers and stakeholders	2.45	3.83	-1.38
Participation by everyone and teamwork	2.59	3.64	-1.05
Process focus and continuous improvement	2.31	3.96	-1.65
Average	2.45	3.81	-1.36

This data is clearly presented in a graphical form in figure 4.8 below.

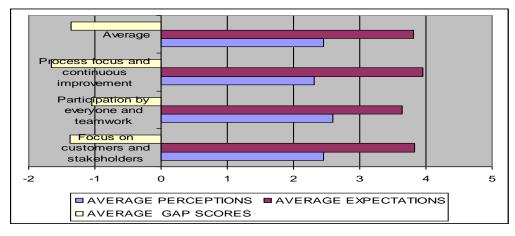


Figure 4.8: Total Quality Index

It can be seen in figure 4.8 that the expectations average scores exceed the perceptions average scores for all three principles of TQ. Figure 4.8 also clearly presents an overall gap score of -1.36, which represents the total average gap scores for all three principles.

## 4.7 INFERENTIAL ANALYSIS - CROSS TABULATIONS

The following cross tabulations are used to present the relationship between the respondents' demographics and their perceptions about the statements given in section.

## 4.7.1 AGE AND GENDER

Table 4.17 presents the relationship between the respondents' age group and their gender. It shows that the highest percentage (18.3%) of male respondents were from the age groups 26-30 and 41-45 respectively, while the lowest percentage (5%) was from both the age groups >25 and <51 respectively. The highest percentage (30.9%) of female respondents was from the age group ranging 36-40, and the lowest percentage (2.1%) was from the age group 26-30.

		GENDER (%)			
	Age Group	Male	Female		
	<25	5	6.2		
	26-30	18.3	2.1		
	31-35	35	26.8		
Age	36-40	15	30.9		
1	41-45	18.3	21.6		
	46-50	3.3	6.2		
	>51	5	6.2		
	TOTAL	100	100		

Table 4.17: Age and Gender

## 4.7.2 AGE AND EMPLOYMENT CATEGORY

Table 4.18 portrays the respondents' age and their employment category.

			EMPLOYME	NT CATEG	ORY (%)	
	Age Group	Accountancy	Administration	Clinical	Human Resource	Other health professionals
	<25	0	5.6	6.0	0	7.7
	26-30	0	14.8	6.0	0	0
e	31-35	33.3	11.1	43.4	100	23.1
Age	36-40	16.7	14.8	30.1	0	38.5
	41-45	50	35.2	7.2	0	23.1
	46-50	0	9.3	2.4	0	7.7
	>51	0	9.3	4.8	0	0
	Total	100	100	100	100	100

 Table 4.18: Age and Employment category

The cross-tabulation reveals that the highest percentage (50%) of respondents in Accountancy is in the age group 41-45. In administration, the highest percentage (35.2%) is in the age group 41-45. In the Clinical category, the highest percentage (43.4%) is in the age group 31-35. In human resources, 100% of the respondents are in the age group 31-35%. In other health professional category, the highest percentage (38.5%) is in the age group 36.40.

## 4.7.3: EMPLOYMENT CATEGORY AND LENGTH OF SERVICE

Table 4.19 portrays the respondents' length of service and their employment category.

		EMPLOYMENT CATEGORY (%)						
	Length of service	Accountancy	Administration	Clinical	Human Resource	Other health professionals		
Length of service	<1	0	3.7	6.0	0	0		
	1-5	66.7	22.2	38.6	0	15.4		
	6-10	16.7	20.4	32.5	100	38.5		
	11-15	16.7	22.2	15.7	0	7.7		
	16-20	0	31.5	4.8	0	38.5		
	>20	0	0	2.4	0	0		
	TOTAL	100	100	100	100	100		

Table 4.19: Employment category and length of service

Table 4.19 reveals that the highest percentage (66.7%) of respondents in accountancy has been employed in the hospital for the period between 1 and 5 years (1-5). In Administration, the highest percentage (31.5%) has been serving the hospital for 16 to 20 years. The highest percentage (38.6%) in the clinical category falls under the period between 1-5 years. In the human resource category 100% of the respondents have been in the hospital for the period between 6-10 years. Other health professionals have the highest percentage (38.5%) in the period between 6-10 years.

## 4.7.4 Employment category and the hospital's objectives

Table 4.20 represents the respondents' employment category and their perceptions about the employees' understanding of the hospital objectives.

		Employee understand hospital objective					
	Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
Employment category	Accountancy	3.3	3.4	11.1	4.2	0	
	Administration	33.3	44.8	11.1	41.7	27.0	
	Clinical	56.7	44.8	77.8	41.7	62.2	
	Human resource	0	0	0	2.1	0	
	Other	6.7	6.9	0	10.4	10.8	
	TOTAL	100	100	100	100	100	

Table 4.20 Employment category and hospital objectives

The cross tabulation analysis shows that the highest percentage (11.1%) of respondents in accountancy category is not sure if they know the hospital's objectives. In Administration, the highest percentage (44.8%) of the respondents disagree with the statement that employees know hospital objectives. In the clinical category, the highest percentage of the respondents (77.8) is not sure (uncertain) if they know the objectives of the hospital. In human resource 2.1% of the respondents' agree that they know the objectives. The highest percentage (10.8%) of the respondents in other health professionals' category strongly agrees that they know the hospital's objectives.

# 4.7.5 Employment category and employee training and development needs

Table 4.21 illustrates the respondents' employment category and their' perceptions with regard to management's understanding of the employee needs.

		Management understand employee training needs (%)					
	Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
gory	Accountancy	4.1	3.2	0	0	0	
Employment category	Administratio n	41.1	32.3	30.8	28.1	0	
/ment	Clinical	46.6	58.1	69.2	59.4	50	
mploy	Human resource	0	0	0	3.1	0	
Ð	Other	8.2	6.5	0	9.4	50	
	TOTAL	100	100	100	100	100	

Table 4.21 Employment category and training needs

The cross-tabulation above depicts that the highest percentage (4.1%) of respondents in the Accountancy category strongly disagree that management understands their training and development needs. In Administration, the highest percentage (41.1%) of respondents strongly disagrees. The highest percentage (69.2%) of respondents in the Clinical category is not sure (uncertain) if the hospital management understands employees' training and development needs. 3.1% of the respondent in the human resource category agree, whilst the highest percentage (50%) of respondents in "other' category strongly agree.

## 4.7.6 Employment category and Feedback from patients

Table 4.22 presents the respondents' employment category and their perceptions about the statement which states that "management seeks feedback from patients regarding the service provided.

		Management seek feedback from patients (%)				
	Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Employment category	Accountancy	4.1	3.2	0	0	0
	Administration	41.1	32.3	30.8	28.1	0
men	Clinical	46.6	58.1	69.2	59.4	50
mploy	Human resource	0	0	0	3.1	0
Е	Other	8.2	6.5	0	9.4	50
	TOTAL	100	100	100	100	100

Table 4.22: Employment category and feedback from patients

The above cross tabulation shows that the highest percentage (4.1%) of respondents in Accountancy strongly disagrees. In administration, the highest percentage (41.1%) of respondents strongly disagrees. The highest percentage (69.2%) of respondents in the clinical category is not sure (uncertain). In human resource, 3.1% of respondents agree with the statement. The highest percentage (50%) of respondents in the other health professional category strongly agree that management seeks feedback from patients.

# 4.7.7 Employment category and communication channels

The cross tabulation in Table 4.23. illustrates the respondents' perceptions about communication channels in the hospital. It shows that the highest percentage (8.3%) of respondents in accountancy agrees. The highest percentage (58.3%) of respondents in administration also agrees. In clinical, the highest percentage (66.7%) of respondents is not sure. Three point seven percent (3.7%) of respondents in human resource disagrees. In "other' category, the highest percentage (18.5%) of respondents disagrees.

		Information flow from management and employees (%)					
	Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
Employment category	Accountancy	4.0	0	6.7	8.3	0	
	Administration	37.6	22.2	13.3	58.3	50.0	
	Clinical	53.3	55.6	66.7	25.0	50.0	
nploy	Human resource	0	3.7	0	0	0	
En	Other	5.0	18.5	13.3	8.3	0	
	TOTAL	100	100	100	100.1	100	

# Table 4.23 Employment category and communication channels

## 4.7.8 Employment category and work teams

Table 4.24 represents the respondents' perceptions about the statement which states that management builds strong work teams. It reveals that the highest percentage (5.6%) in accountancy strongly agrees that management builds strong work teams. In administration, the highest percentage (44.9%) agrees with the statement. The highest percentage (55.9%) of respondents in the clinical category strongly disagree. In Human Resource, 2.4% of respondents disagrees with the statement. The highest percentage (35%) of respondents in the other health professional category is uncertain.

	Management build strong work teams (%)					
Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
Accountancy	2.9	4.8	0	4.1	5.6	
Administration	32.4	28.6	25.0	44.9	27.8	
Clinical	55.9	54.8	50.0	51.0	50.0	
Human resource	0	2.4	0	0	0	
Other	8.8	9.5	25.0	0	16.7	
TOTAL	100	100	100	100	100	
	Category Accountancy Administration Clinical Human resource Other	Employment CategoryStrongly disagreeAccountancy2.9Accountancy32.4Administration55.9Clinical0Human resource8.8Other8.8	Employment CategoryStrongly disagreeDisagreeAccountancy2.94.8Accountancy32.428.6Administration55.954.8Clinical02.4Human resource8.89.5Other8.89.5	Employment CategoryStrongly disagreeDisagreeUncertainAccountancy2.94.80Accountancy32.428.625.0Administration55.954.850.0Clinical02.40Human resource8.89.525.0Other8.89.525.0	Employment CategoryStrongly disagreeDisagreeUncertainAgreeAccountancy2.94.804.1Accountancy32.428.625.044.9Administration55.954.850.051.0Clinical02.400Human resource8.89.525.00	

# Table 4.24Employment category and work teams

# 4.7.9 Employment category and integrated processes

The cross tabulation in Table 4.25 presents the respondents' employment category and their perceptions about integration of hospital processes.

		Integrated processes (%)					
	Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
gory	Accountancy	8.0	1.9	0	3.7	0	
Employment category	Administration	32.0	35.2	45.5	25.9	50.0	
ment	Clinical	60.0	57.4	45.5	40.7	25.0	
nploy	Human resource	0	1.9	0	0	0	
Er	Other	0	3.7	9.1	29.6	25.0	
	TOTAL	100	100	100	100	100	

Table 4.25: Integrated processes
----------------------------------

The above table shows that the highest percentage (8%) of respondents in accountancy strongly disagree that hospital processes are integrated. The highest

percentage (45.5%) of respondents in administration is not sure. In clinical, the highest percentage (60%) strongly disagrees that the processes are integrated. One point nine percent (1.9%) of respondents in human resource disagrees. The highest percentage (29.6%) of respondents in other health professionals' category agrees.

#### 4.7.10 Employment category and continuous improvement

The following cross tabulation illustrates the respondents' employment category and their perceptions about continuous improvement of the hospital processes. It depicts that the highest percentage (10%) of the respondents in accountancy disagree that the hospital processes are continuously improved. The highest percentage (42.9%) in administration agrees. In clinical, the highest percentage (68.8%) of the respondents are not sure. One point two percent (1.2%) of the respondents in human resource strongly disagrees. The highest percentage (10%) of respondents in ,,other' category disagrees.

		Continuous improvement (%)				
	Employment Category	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Employment category	Accountancy	1.2	10	6.3	4.8	9.5
	Administration	38.4	20	18.8	42.9	33.3
	Clinical	50	60	68.8	47.6	47.6
	Human resource	1.2	0	0	0	0
	Other	9.3	10	6.3	4.8	9.5
	TOTAL	100	100	100	100	100

Table 4.26: Employment category and continuous improvement

#### 4.8 Summary

This chapter presents the results obtained from the completed questionnaires. It shows the respondents' profile in terms of gender, age, qualifications, employment category, and length of service. It also provides an analysis of the relationship between the respondents' demographics and their perceptions and expectations about TQM. Furthermore, the gap that exists between the employees' perceptions and expectations is also calculated and presented. These are based on three fundamental principles of TQ namely: focus on customers and stakeholders, participation by everyone and team work, and process focus and continuous improvement. Cross tabulations are used to analyse the relationship between the respondents' employment category and their perceptions about some critical statements stated in each TQ principle.

The next chapter discusses the results of this study as presented in this chapter

# **CHAPTER 5**

### **DISCUSSION OF THE RESULTS**

#### 5.1 INTRODUCTION

This chapter discusses data presented in the previous chapter and it attempts to confer analysis of the results. This research study assesses the employees' perceptions about TQM at Q.E.II hospital and their expectations about TQM that will be implemented in the new PPP referral hospital. Understanding employees' views is vital in TQM implementation as Evans and Lindsay (2008) infer that the employees' own opinions are vitally important in preventing misinterpretations and ensuring optimal service quality.

As stated previously, the research is based on three fundamental principles of TQ namely focus on customers and stakeholders, participation by everyone and teamwork, and process focus and continuous improvement. The gap that exists between employees' perceptions and expectations is measured by computing the scores for each of the three fundamental principles.

The discussion in this chapter is based on the research objectives as follows:

- To assess the perceptions of employees on TQM at Queen II hospital
- To explore the expectations of employees on TQM implementation in the new PPP referral hospital
- To determine the gap between the perceived and expected TQM
- To identify areas that need more attention in the new PPP referral hospital to bridge the identified gap the gap.

### 5.2 Objective 1: To assess the perceptions of employees on TQM at Q.E.II hospital

In assessing employees' perceptions of TQM the following results were revealed:

#### 5.2.1 Perceptions in relation to focus on customers and stakeholders

According to Mohanty (2008) successful implementation of TQM depends on employees as they take charge of quality through their commitment, creativity and teamwork. The author further states that "voice of the customer is the determining factor in TQM...with customer at the centre stage guiding and directing the flow of production of products and service, quality is the buzzword and the organization strives to embrace the quality enhancement measures" (Mohanty, 2008, p.298).

As shown in table 4.7 the statement that employees are rewarded for good performance had the highest percentage (86.6%) of the respondents who strongly disagree. It is also shown in table 4.13 that this statement had the lowest average score of 1.17. These imply that Q.E.II hospital has no reward system in place.

The statement that "equipment used is in good condition' scored the second lowest average score of 1.79 (table 4.13) and 49% (table 4.7) of the respondents disagree that the equipment they use is in good condition. This is of great concern as it shows that Q.E.II hospital employees feel that the equipment they use is in poor condition.

The statement which states that management seeks feedback from patients had the highest percentage of 57.3% of respondents who strongly disagree (table 4.7). This statement had the average score of 1.87 (table 4.13). These suggest that patients' healthcare needs are not satisfied since their views regarding the quality of service provided are not considered.

It is shown in table 4.7 that 45.2% of the respondents strongly disagree with the statement which states that employees are trained. This statement had an average score of 2.04 (table 4.13), which implies that fewer employees are given an opportunity to develop their skills through training, and it also gives an impression that the importance of training is less considered at Q.E.II hospital. Evans and Lindsay (2008) state that in order to ensure total quality within an organization, employees have to be given the training and responsibilities to achieve quality improvement goal and to feel that they do indeed make a difference.

Table 4.13 and 4.7 show that the statement about whether supervisors are supportive got the highest average score of 3.70, and a large percentage (57.3%) of respondents agree that their supervisors are supportive. Weber and Weber (2001) assert that a work environment where management is supportive of employees provides a foundation for open employee participation and involvement.

The overall average score for the perceptions regarding focus on customers and stakeholders principles was 2.45 (table 4.16), which is the middle overall average score of all three principles. This suggests the need for improvement with regard to focus on employees, patients and other stakeholders.

### 5.2.2 Perception in relation to participation by everyone and teamwork

Participation and involvement by everyone within an organization is "the process of achieving broad employee interest, participation and contribution in the process of quality improvement" (Dale & Cooper 1993 cited in Dimitriades, 2000, p.118). Moreover, Evans and Lindsay (2008) state that the involvement of staff is enhanced by establishing various teams comprising of managers, employees, customers and suppliers, responsible for continuous quality improvement.

Teamwork seems to be the strongest point in the hospital according to the respondents' perceptions. The statement which states that employees work as a team got the highest overall average score of 3.79 (table 4.14). This statement had the highest percentage (49.7%) of respondents who agree (table 4.8). This implies that the employees in the hospital work together as a team. McLaughlin and Kaluzny (2006) infer that teams play a crucial part in all aspects of healthcare, and it is the primary vehicle in quality improvement through which problems are analyzed, solutions are generated and change is evaluated.

The statement which states that information flows both from management and employees had the lowest average score of 1.64 (table 4.14). This statement had

the highest percentage (64.3%) of respondents who strongly disagree (table 4.8). This indicates that respondents feel that information within the hospital only flows downwards from top management to employees, but not from employees upwards. Towill (2009:187) regards this as "deadly sin' characterized by "failure to involve the right people such as clinicians, support staff, and top management in an effective way".

The second lowest average score of 1.65 (table 4.14) was for the statement which states that employees get involved in decision-making. This statement had the highest percentage (60.5%) of respondents who strongly disagree (table 4.8). This shows that employees feel that they do not get involved in decision-making.

The overall score for the participation by everyone and teamwork principle of TQ was 2.59 (table 4.16). Although this is the highest score among all three fundamental principles of TQ, it does not, however, imply that participation and teamwork are fully ensured in the hospital. The percentages and average scores of the responses suggest that improvement is needed with regard to participation by everyone and teamwork in the hospital.

# 5.2.3 Perception in relation to process focus and continuous improvement

Process focus is an important aspect of total quality as Evans and Lindsay (2008) state that a good process focuses on the prevention of poor quality by ensuring that the process is capable of achieving the requisite level of performance in order to meet internal and external customer requirements.

The statement which states that hospital processes are regularly reviewed had the lowest average score of 1.88 (table 4.15). This statement also had the highest percentage (62.4%) of respondents who strongly disagree (table 4.9). This implies that employees feel that the hospital processes are not reviewed.

The second lowest average score of 2.17 (table 4.15) was for the statement which states that management monitors compliance with healthcare standards and

procedures. This statement also got the highest percentage (33.1%) of respondents who were uncertain (table 4.9). This indicates that compliance with healthcare standards and procedures is not monitored.

The highest score of 2.69 (table 4.15) was for the statement which states that employees understand hospital processes. This statement, however, had the highest percentage (32.5%) of respondents who strongly disagree (table 4.9). This suggests that improvement is needed in ensuring that employees understand the hospital processes.

The overall average score for the process focus and continuous improvement principle was 2.31 (table 4.16), which is the lowest average score of all three principles of TQ. This implies that less focus is put on the hospital process.

# 5.2.4 Employee perceptions - Inference

The highest overall average score of 2.59 (table 4.16) in the perception section was on participation by everyone and teamwork principle. Considering the scores and percentages for each statement, it is evident that the statement which states that employees work as a team reflects the positive perceptions, while employee involvement in decision-making reflects very low perceptions. These imply that, although employees feel they are not involved in decision making, they strongly deem that they work as a team with their co-workers.

It is shown in table 4.16 that the process focus and continuous improvement got the lowest overall score of 2.31. This is followed by focus on customers and stakeholders principle, which got the middle average score of 2.45. These imply that employees have low perceptions with regard to focus on customers and stakeholders, as well as process focus and continuous improvement within the hospital. The TQ index reflects that generally employees had relatively low perceptions about TQM at Q.E.II hospital as the average perception score for all three TQ principles was 2.45 (table 4.16)

# 5.3 Objective 2: To explore the expectations of employees on TQM in the new PPP referral hospital

Zeithaml et al (2009) define expectations as the beliefs about the level of service that is anticipated to be delivered by the service provider, and they are regarded as standards or reference points through which service performance is measured. According to Lee (2006) employees have expectations based on their knowledge of some physical environmental limitations through their experiences and residency in the environment, and they expect desirable yet feasible potentials from their work environment.

The following is a discussion on the outcome from exploring the expectations of employees with regard to TQM that will be implemented in the new PPP referral hospital.

# 5.3.1 Expectations in relation to focus on customers and stakeholders

The respondents feel that it is important for the work environment in the new PPP referral hospital to be conducive for employees to work. The statement which states that the work environment will be conducive had the highest average score of 4.13 (table 4.13). This statement also had the highest percentage (45.9%) of respondents who strongly agree (table 4.10). This implies that employees' expectations in this regard are exceptionally high.

The statement that employees will be provided with adequate resources had the second highest average score of 4.11 (4.13). This statement had the highest percentage (40.1%) of respondents who strongly agree (4.10). These signify that

employees have positive expectations about provision of resources in the new hospital.

The lowest expectation score that was measured for this principle of TQ was for the statement which states that management will seek feedback from patients. This statement attained an average score of 3.37 (4.13). It also had the highest percentage (38.2%) of respondents who were uncertain (4.10). This implies that employees are doubtful or unsure if management in the new referral hospital will seek feedback from patients with regard to the service provided.

The second lowest average score of 3.39 (4.13) was for the statement that employees will be rewarded for good performance. This statement had the highest percentage (31.8%) of respondents who are uncertain (4.13). These indicate that employees are pessimistic that their performance will be rewarded in the new hospital.

The overall average expectation score for the focus on customers and stakeholders principle was 3.83 (table 4.16), which is the middle score among three fundamental principles of TQ. This value suggests that employees have high expectations with regard to the manner in which focus will be placed on customers and stakeholders in the new referral hospital. It also puts forward that management has to consider the needs and expectations of both customers and stakeholders in ensuring total quality management in the hospital.

#### 5.3.2 Expectations in relation to participation by everyone and teamwork

The respondents are certain that employees will share resources in the new PPP referral hospital. The statement which states that "employees will share resources obtained the highest average score of 4.21 (table 4.14). This statement also had the highest percentage (45.2%) of respondents who strongly agree (table 4.11). These denote that employees' expectations with regard to resource sharing are relatively high.

The statement which states that "there will be clear communication channels' had the second highest average score of 4.07 (table 4.14). This statement also had the highest percentage (51%) of respondents who strongly agree (table 4.11). This shows highly positive expectations concerning communication channels within the hospital.

The lowest average score for this principle was 2.86 (table 4.14). This score was for the statement that "employees will get involved in decision-making'. The highest percentage (26.1%) of respondents who disagree was also recorded for this statement (table 4.11). These indicate that employees have negative views with regard to their involvement in decision-making. However, although the value of 2.86 (table 4.14) represented the lowest average score for this principle, being a positive value implies that it is still relatively high enough to reflect that employees do have high expectations with regard to their' involvement in decision-making in the new referral hospital.

The statement which states that information will flow both from management and employees got the second lowest average score of 2.93 (table 4.14). Also, the highest percentage (36.9%) of respondents was uncertain (table 4.11). It is evident from these scores that employees are indecisive as to whether information will flow from both directions – top-down and bottom-up. These values are however, still large enough to signify positive expectation concerning cross information flow within the hospital.

The overall average score on participation by everyone and the teamwork principle is 3.64 (table 4.16). This value is the lowest average score among the three principles. However, this figure is considered to be high enough to denote that employees have relatively positive expectations with regard to their involvement and teamwork.

# 5.3.3 Expectation in relation to process focus and continuous improvement

Employees feel that healthcare standards will be in place in the new PPP referral hospital. This is revealed by the highest average expectation score of 4.14 (table 4.15) and the highest percentage (43.3%) of respondents who agree with the statement (table 4.12). These imply that employees have enormously high expectations with regard to healthcare standards.

Both the statements which state that "management will monitor compliance with healthcare standards and procedures', and "management will ensure process integration' respectively got the second highest average score of 4.01 (table 4.15). Also, these statements obtained the highest percentages of 39.5% and 41.4% of respondents who agree (table 4.12). It is apparent in these scores that employees' expectations concerning these aspects are very high.

The lowest recorded average score of 3.87 (table 4.15) was for the statement which states that hospital processes will be continuously improved. The highest percentage (38.9%) of respondents agrees with the statement (table 4.12). Though this is the lowest value, it reflects that employees expect hospital processes to be continuously improved.

The statement which states that hospital processes will be regularly reviewed got the second lowest score of 3.89 (table 4.15), and the highest percentage (36.3%) of respondents who agree with the statement (table 4.12). These show that employees' expectations are high with regard to regular process review.

The overall average score recorded for expectations of process focus and continuous improvement was 3.96 (table 4.16), which is the highest average score among all three fundamental principles of TQ. The implication of this value is that employees' expectations concerning process focus and continuous improvement are tremendously high.

#### 5.4 Employee expectations - Inference

The recorded scores show that employees have high expectations of TQM in the new PPP National referral hospital. The overall average score on expectations for all three fundamental principles of TQ was 3.81. The process focus and continuous improvement principle attained the highest overall average core of 3.96 in the expectation section. This was followed by focus on customers and stakeholders with an average score of 3.83. These indicate that the respondents highly expect management in the new hospital to place more focus on the process, employees, patients, and other stakeholders, and to continuously improve the hospital processes.

The lowest overall average score of 3.64 recorded on the expectations section is for participation by everyone and teamwork. Although this reflects the smallest value among all three principles, it is found to be significantly high enough to represent immense expectation regarding involvement by everyone and teamwork among employees.

# 5.5 Objective 3: To determine the gap between the perceived and expected TQM

Douglas and Connor (2003, p.167) state that "customers' perceptions are based on the actual service they receive, while their expectations are based on past experiences and the information received". Zeithaml et al (2009) assert that the customer gap occurs between the expectations that they bring into the service experience, and the perceptions or assessment of the actual service experience.

In determining the gap that exists between employee perceptions on TQM at Q.E. II hospital and their expectations on TQM that will be implemented in the new PPP referral hospital, the following were revealed:

#### 5.5.1 Gap analysis - focus on customers and stakeholders

The statement which states that employees are rewarded for good performance attained the highest gap score of -2.22. This value was based on the difference between the score of the employee perceptions of 1.17 and their expectation score 3.39. This score being the highest gap value implies that Q.E.II hospital employees are not rewarded for good performance. It also suggests that there is a need for hospital management to reassess their ability to acknowledge employee performance through both intrinsic and extrinsic rewards.

The lowest gap score of 0.02 in the focus on customers and stakeholders principle was for the statement regarding supervisor support. This gap value was computed from the difference between the employee perceptions score of 3.70 and the expectations score of 3.68. This score reflects the positive value, which indicates that employees feel that their supervisors give them the support they need. Supervisor support is highly important in TQM as it enables employees to carry out their duties as expected.

An overall gap score for the "focus on customers and other stakeholders' principle was -1.38, which is the middle score of all three principles. This value was computed as the mean of all the gap scores. Since all the statements, except the one which states that "my supervisor is supportive', reveal negative scores, it is evident that there is a high degree of employee dissatisfaction with regard to the manner in which focus is placed on both internal (employees) and external (patients) customers as well as other stakeholders.

#### 5.5.2 Gap analysis – Participation by everyone and teamwork

The highest gap score of -1.42 for participation by everyone and teamwork principle was for the statement which states that "employees present their views regarding their job'. This score was the difference between the perceptions score

of 1.73 and the expectation score of 3.15. Since this statement got the highest negative value among all other statements, it is evident that Q.E.II hospital employees are not allowed to voice out their opinions regarding their job. This suggests that there is a need for hospital management to consider employees' views and incorporate them in decision-making.

The statement which states that "my colleagues and I work as a team' got the lowest gap score of -0.27. The implication is that Q.E.II hospital employees strongly believe that they work as a team with their colleagues. Even though this is the lowest score, its negative value indicates that there is still a gap that has to be filled with regard to team work amongst the hospital employees.

An overall gap score for "participation by everyone and teamwork' principle was -1.05, which is the lowest gap score of all three principles. Since this figure has a negative value, and all the statements in this principle also received negative gap scores, it implies that employees are discontented with everybody's participation in the hospital and teamwork among employees.

#### 5.5.3 Gap analysis – Process focus and continuous improvement

The process focus and continuous improvement principle had the highest gap score of -2.01. This score was based on the difference between employee perceptions score of 1.88 and their expectations score of 3.89, for the statement which states that "hospital processes are reviewed regularly'. This indicates that hospital processes are not regularly reviewed, and this contributes to poor quality management within the hospital.

The statement which states that work flows well between departments got the lowest gap score of -1.49. Even though this gap is comparatively smaller, its negative value indicates that the manner in which work flows between the hospital's departments is not completely pleasing. This, therefore, suggests that hospital management need to address this problem.

An overall gap score for the process focus and continuous improvement principle was -1.65, which is the highest gap score. This reflects employees' displeasure in relation to all aspects that constitute process focus and continuous improvement. It also suggests that there is a need for hospital management to alter their focus towards the hospital process and to continuously improve that process.

# 5.6 Objective 4: To identify areas that need more attention in the new PPP Referral hospital

Achieving successful implementation of TQM in healthcare is not always easy (Jackson, 2001). The author further states that the vision for TQM should contain clarity on the areas that require more focus in relation to the needs of both internal and external customers, norms and behaviors within an organization, as well as crucial areas that leaders need to take on board.

In identifying areas that need more attention to augment successful implementation of TQM in the new PPP referral hospital, the following were ascertained:

#### 5.6.1 Individual statements

All the individual statements for each TQ principle attained negative gap scores, except one statement that got the positive score of 0.02. This is the statement which states that supervisors are supportive. This implies that Q.E.II hospital employees are discontent with all aspects that contribute towards total quality management within the hospital, except that they get all the support they need from their supervisors.

The gap scores for each individual statement in descending order are shown in table 5.6.1 below:

Statements	Perceptions	Expectations	Difference
	(Mean)	(Mean)	(P-E)
Rewards	1.17	3.39	-2.22
Equipment condition	1.79	3.98	-2.19
Regular process review	1.88	3.89	-2.01
Conducive environment	2.16	4.13	-1.97
Provision of resources	2.25	4.11	-1.86
Monitoring	2.17	4.01	-1.84
Process integration	2.25	4.01	-1.76
Collaborative healthcare plan	2.26	3.99	-1.73
Training courses	2.04	3.77	-1.73
Ensuring knowledge of health	2.21	3.91	-1.7
standards	2.21	5.91	
Training needs	2.10	3.73	-1.63
Continuous process improvement	2.25	3.87	-1.62
Sensitivity to needs	2.16	3,76	-1.6
Communication	2.29	3.80	-1.51
Healthcare standards	2.63	4.14	-1.51
Feedback from patients	1.87	3.37	-1.5
Workflow between departments	2.41	3.90	-1.49
Employees' views	1.73	3.15	-1.42
Cross information flow	1.64	2.93	-1.29
Involvement in decision-making	1.65	2.86	-1.29
Understanding hospital processes	2.69	3.95	-1.26
Building strong teams	2.84	4.03	-1.19
Decisions regarding employees	1.75	3.43	-1.17
Teamwork encouraged	2.74	3.91	-1.17
Patients needs	2.67	3.77	-1.1
Communication channels	2.97	4.07	-1.1
Objectives	3.22	3.93	-0.71
Top-down information flow	3.03	3.74	-0.71
Performance appraisal	3.24	3.84	-0.6
Sharing resources	3.75	4.21	-0.46
Teamwork	3.79	4.06	-0.27
Performance recognition	3.66	3.92	-0.26
Supervisor support	3.70	3.68	0.02

## Table 5.1 Individual statement scores

In consideration of the statements gap score rankings, it is apparent that only statements from two principles, "focus on customers and stakeholders principle', and "process focus and continuous improvement principle' appeared in the first sixteen highest scores. Nine of these statements were on the focus on customers and stakeholders, while seven of them were on the process focus and continuous improvement principles.

The highest gap score of -2.22, which was the difference between the perception score of 1.17 and expectation score of 3.39 was for the statement that "employees are rewarded for good performance'. It is evident from this value that employees feel that their performance is not rewarded, and they highly expect rewards in the new PPP referral hospital. The highest gap score of -2.01 on the process focus and continuous improvement principle was for the statement that hospital process are regularly reviewed.

Since the majority of the statements in these two principles attained the highest gap scores, it implies dissatisfaction with regard to the manner in which focus is placed on both the customers and stakeholders, as well as on the process and continuous improvement within the hospital. Hence, it suggests that more attention is needed in the areas that constitute the focus on customers and stakeholders, as well as process focus and continuous improvement.

The statement gap score rankings also reveal that none of the statements on participation by everyone and teamwork featured in the highest sixteen gap scores. The highest gap score of -1.42 on this principle was for the statement that ,,employees are allowed to present their views'. The second highest gap score of -1.29 for participation by everyone and teamwork was for the statements which stated that ,,information flows both from management and employees', and that ,,employees get involved in decision-making' respectively.

All the individual statements, except the statement regarding supervisor support, attained negative gap scores. This indicates that attention is required in all aspects of TQ.

#### 5.6.2 TQ Index

It is evident from the results that gaps occurred in all three fundamental principles of TQ (Table 4.16). These gaps represent factors that contribute to poor TQM at Q.E.II hospital. Table 5.2 presents the average scores for employee perceptions, expectations as well as gap scores in ascending order.

TQ PRINCIPLES	AVERAGE	AVERAGE	AVERAGE	
	PERCEPTIONS	EXPECTATIONS	GAP SCORES	
Participation by everyone and	2.59	3.64	-1.05	
teamwork				
Focus on customers and	2.45	3.83	-1.38	
stakeholders				
Process focus and continuous	2.31	3.96	-1.65	
improvement				
Total average	2.45	3.81	-1.36	

Table 5.2Average gap scores in ascending order

Table 5.2 shows that the overall average gap score for all three principles of TQ was -1.36. The greatest difference between perceptions and expectations was apparent for the process focus and continuous improvement principle with an average gap score of -1.65. This was followed by -1.38 for focus on customers and stakeholders, while the lowest gap score of -1.05 was for the participation by everyone and teamwork. These scores reveal very low focus on both the hospital processes and the customers (internal and external).

The negative values on the average gap scores were due to the obvious fact that employees' expectations of TQM in the new PPP referral hospital exceed their perceptions about TQM at Q.E.II hospital, which implies that there is a need to put focus on all three facets in order to ensure total quality in the new PPP referral hospital.

#### 5.6.3 Inferential analysis

#### Employment category and Focus on customers and stakeholders

The research results portray that by and large, the majority of the respondents in administration and accountancy categories strongly disagreed with the statements concerning focus on customers and stakeholders. The largest percentage of respondents in the clinical category responded "uncertain' to most of the statements on this principle. This indicates that respondents in the clinical category maintained neutrality and reserved their opinions with regard to focus on customers and stakeholders. The majority of respondents in "other' health professionals show some satisfaction in this regard as most of them strongly agreed with the statements. This suggests that the accountancy, administration, and clinical categories need more attention with regard to the manner in which hospital management places their focus on both customers (internal and external) and stakeholders.

#### **Employment category and Participation by everyone and teamwork**

The data reveals that the clinical category was dissatisfied with participation by everyone and teamwork within the hospital. The majority of respondents in the clinical category strongly disagree with the statements. The respondents in the human resource category disagree, while most of the respondents in the "other' health professionals were not sure. These findings put forward that these categories need more attention in the new PPP referral hospital in terms of their participation and teamwork within the hospital.

#### **Employment category and Process focus and continuous improvement**

The process focus and continuous improvement received gloomy responses from the various employment categories. Only respondents in administration agreed with most of the statements. Other categories such as accountancy, clinical, human resources and "other' health professions disagree with the statements on process focus and continuous improvement. These necessitate more concentration on the process focus and continuous improvement across all employment categories in the new referral hospital.

#### 5.6.4 Summary

This chapter provides an analysis of the results presented in the previous chapter. It reveals dissatisfaction with almost all aspects that constitute total quality, as out of 33 statements, only one reveals a positive gap score. It further showed that for all three of the fundamental principles of total quality there were negative gap scores. This implies that attention is needed in all areas and all employment categories in order to ensure that TQM implementation becomes a success in the new PPP referral hospital.

The next chapter concludes this study and provides recommendations drawn from the findings.

# CHAPTER SIX CONCLUSION AND RECOMMENDATIONS

#### 6.1 Introduction

Employees are the initial point through which customers come into contact with an organization. Hence, their involvement in quality improvement initiatives is the most crucial aspect in determining service quality and ensuring total quality management within an organization. Evans and Lindsay (2008) state that most healthcare organizations have noticed measurable improvements from their quality initiatives, although, they still face the most difficult challenge of getting health professionals involved in the quality process.

This chapter attempts to draw conclusions from the results of the study as presented and discussed in the previous chapters. It also offers recommendations and suggestions for resolving the identified problems and ensuring quality improvement in the hospital, in which this study was conducted.

#### 6.2 Conclusion

This research study attempted to establish employees' perceptions about TQM at Q.E.II hospital, and their expectations on the implementation of TQM in the new national referral hospital. The motive for this study transpired from Jackson's (2001) view that accomplishing TQM in healthcare is not always easy, hence health professionals may feel a sense of despair when management promotes TQM measures due to some assertions that TQM in healthcare is "a worthless endeavor that achieves no benefits whatsoever' (Jackson, 2001:157).

The focus of this study is on three fundamental principles of TQ, namely focus on customers and stakeholders, participation by everyone and teamwork, as well as process focus and continuous improvement. It addresses the following objectives:

- To assess the perceptions of employees on TQM at Q.E. II hospital
- To explore the expectations of employees on TQM to be implemented in the new PPP referral hospital
- To determine the gap between the perceived and expected TQM
- To identify areas that need more attention in the new PPP referral hospital to bridge the identified gap.

The following trends were derived from the findings of this study:

Firstly, Q.E.II hospital employees have relatively low perceptions about TQM at this hospital. Among all three principles, employees portrayed comparatively poor perceptions on process focus and continuous improvement. However, focus on customers and stakeholders, as well as participation by everyone and teamwork also reflected that employees hold very low perceptions about TQM at Q.E.II hospital.

Secondly, this study showed that Q.E.II hospital employees have incredibly high expectations regarding TQM in the new PPP national referral hospital. Expectations seemed to be extremely high on the process focus and continuous improvement. This was followed by focus on customers and stakeholders, and participation by everyone and teamwork respectively.

Thirdly, the findings of this study revealed enormous gaps between employees' perceptions and expectations in all three fundamental principles of TQ. This suggests, therefore that employees' expectations regarding TQM in the new PPP National hospital far exceed the perceptions they hold about TQM at Q.E.II hospital. A comparatively high gap was portrayed in the process focus and continuous improvement principle of TQ. It is, however, apparent from the scores that gaps existed in other two principles, namely focus on customers and stakeholders, as well as participation by everyone and teamwork.

Lastly, attention is needed in all areas that constitute TQ as all the individual statements attained negative gap scores, except the statement which states that supervisors are supportive. The five statements that revealed the highest gap

scores, in descending order, were the statements regarding "rewards', "equipment condition', "regular process review', "conducive environment', as well as "provision of resources'.

Thus, it is inferred that there is a serious quality problem at Q.E.II hospital with a low level of implementation of TQM. However, whilst employees' perceptions are extremely low, their expectations concerning TQM implementation in the new PPP national referral hospital are tremendously high. Moreover, although all three fundamental principles of TQ attained negative scores, it is evident that a huge gap exists in the area of process focus and continuous improvement, which implies that lack of focus on these critical areas, is the major contributing factor to the low level of TQM at Q.E.II hospital. It is, therefore, concluded that attention is needed in all aspects that comprise TQM in order to bridge the existing gap and ensuring a complete TQM in the new PPP national referral hospital.

#### 6.3 Recommendations

The recommendations towards continuous quality improvement (CQI) and appropriate management of TQ are as follows:

• The first step in improving quality of care is an articulation of standards that are needed for the provision of care. This study reveals that whilst 54.2% of employee perceptions are that they agree/strongly agree that they understand the objectives, only 26.7% agree/strongly agree that the objectives are communicated to them. This means that for the hospital management to successfully implement TQM, they need to establish and specify healthcare standards that will serve as the minimum through which employees, patients and other stakeholders will be content. In terms of employee expectations, this study reveals that 70.1% of respondents agree/strongly agree that the objectives will be communicated to employees. Effective communication of quality

objectives will also provide the basis for the level of acceptable performance in an endeavour towards excellence in healthcare service delivery.

- In order to attain TQ within the hospital, it is of great importance to ensure that employees know and understand the hospital objectives, healthcare standards and procedures. More importantly, management must make sure that all employees follow and fully comply with the set standards and procedures. It must be noted that compliance will only be ensured through monitoring of employees performance and behaviour within the organisation.
- It is highly recommended that the hospital management places the needs of customers (internal and external) in the fore-front. Management must be sensitive to the needs of both employees and patients, and this will be shown by seeking their views with regard to their needs and expectations in the hospital, and taking their opinions into consideration and incorporating them in their strategic plans.
- Employee involvement in decision-making is an important component of TQM. Hence, it is recommended that employees be given an opportunity to actively participate in decision-making. It may neither be visible nor practical to involve everyone, but through proper communication channels, as well as top-down and bottom-up information flow within the hospital, employees will be able to voice their opinions and be informed about management decisions regarding their job and the hospital as a whole.
- Necessary efforts must be made to enhance employees' performance towards optimisation of healthcare service quality. Hospital management should endeavour to create a conducive work environment through supportive managerial practices, provision of resources and adequate equipment, as well as training that is needed to equip employees with the skills they need to carry out their daily activities.

- Team building and teamwork are the crucial aspects of TQ as they enhance employees' ability to effectively provide the required quality of service. This study reveals that only 42.8% of respondents agree/strongly agree on the perception that management encourages team work. With regard to the perceptions that management builds strong work teams, only 42.7% of respondents agreed / strongly agreed. It is, therefore, recommended that hospital management use appropriate team building strategies to create team players amongst the employees and strengthen teams. Hospital management may enhance such team cohesion by instilling an atmosphere of working for, and with others through sharing of resources, information and responsibility.
- It is recommended that hospital management strives to foster performance through recognition, appraisals and by creating a system of appropriate rewards and incentives to direct and motivate the accomplishment of desired performance standards and behaviours.
- Since the process focus and continuous improvement principle of TQ attained the highest overall gap score, it is important that hospital management adopts new and effective strategies to bridge this gap. In order to successfully execute the closure of the gap, it is recommended that:
  - The hospital process be clearly defined, known and well understood by everyone within the hospital
  - The hospital must establish a collaborative care plan which clearly stipulates the healthcare process and ensures integration of such processes.
  - Hospital processes must be regularly reviewed and continuously improved. This may be done through regular internal audit, in which the focal points are checked and re-aligned with defined processes, and by adopting an accreditation system that helps in the development of professional practice to enhance quality service delivery. It is, thus,

highly recommended that the following tools and techniques be adopted for successful process review and continuous improvement: "10-Step Monitoring and Evaluation Process for Health Care Organization' shown in Table 2.2 and "FOCUS-PDCA' shown in Figure 2.5.

• It is highly recommended that hospital management adopts TQM techniques such as DMAIC to ensure that all TQM aspects are adhered to so as to optimise TQ within the hospital.

#### 6.4 Suggestions for future research

- This study explores the perceptions and expectations of Q.E.II hospital employees regarding TQM. It is suggested that further research be undertaken to assess patients' views about service quality in the new PPP national referral hospital.
- This study assesses the perspectives of employees from various categories. It is suggested that a comparative research study be done to establish the extent to which health professionals are satisfied with TQM as opposed to non-health professionals.
- The current study uses a quantitative research method. It is suggested that a qualitative study be performed in the hospital as it would allow respondents to give more in-depth responses indicating comments and reasons for their answers to the given statements.
- It is suggested that a comparative study of both the public and private hospital be carried out to establish insight with regards to how these hospitals rate against each other in terms of quality of service provided.
- It is also suggested that a longitudinal research study be undertaken to investigate SERVQUAL and TQM in the new PPP national referral hospital over the 18 years under the management of the private sector.

#### 6.5 Summary

This chapter drew conclusion from the research findings obtained from this study. It shows that there is a significant quality problem at Q.E.II hospital, as employees have relatively low perceptions about TQM principles. It also revealed high expectations regarding TQM that will be implemented in the new PPP national referral hospital. This evidently resulted in a huge gap between the perceived and the expected TQM, which was brought about by the obvious reason that employee expectations far exceed their perceptions. Although all three principles reflected gaps, the highest gap was seen on the process focus and continuous improvement principle. It was, thus concluded that all areas that constitute TQM need more attention in the new national referral hospital.

In order to ensure that TQM is successfully implemented in the new PPP referral hospital, it is recommended that hospital objectives, standards, procedures and processes be well and clearly established. Also, they should be communicated to all employees to ensure that they all know and understand them so that their performance would be in line with the set standards. It is highly recommended that the needs of both employees and patients be in the fore-front. This would be made possible through their involvement in decision-making, by seeking their views with regard to their needs and expectations in the hospital.

Lastly, this chapter provides some suggestions for future research on the areas of TQM and service quality, with the focus on patients' perceptions, comparisons between the perceptions and expectations of health professional and non-health professional, as well as on private and public hospitals to give an insight into how they rate against each other. It also suggests that a longitudinal study would be useful to assess TQM and service quality in the hospital over the years in which the national referral hospital will be under the management of the private sector in terms of the PPP arrangement.

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# APPENDICES

#### **APPENDIX A: LETTER OF INTRODUCTION**

# UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS

Dear Respondent,

Masters in Business Administration Research Project Researcher: MRS Palesa Cecilia Mahao – +27 079 814 0357 / +266 58915113 Supervisor: Dr Abdul Gani, Tel: +27 031 9022160

Co-supervisor: MRS Gill Marion, Tel: +27 031 260 3380

Research Office: MS P Ximba 031-2603587

I, PALESA CECILIA MAHAO, an MBA student, at the University of Kwazulu Natal, invite you to participate in a research project entitled EMPLOYEES' PERSPECTIVES ON TOTAL QUALITY MANAGEMENT AT QUEEN ELIZABETH II HOSPITAL AND THE NEW REFERRAL HOSPITAL. The aim of this study is to explore the Employees views about TQM at Queen II Hospital, and to assess their expectations on TQM implementation in the new PPP Referral Hospital.

Through your participation I hope to understand the employees' perceptions about Total Quality Management at Queen II Hospital, and to understand their expectations on Total Quality Management to be implemented in the new PPP Referral Hospital. The results of the survey are intended to contribute towards optimization of Quality healthcare and service delivery in the new PPP Referral Hospital.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey/focus group. Confidentiality

and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about 10-15 minutes to complete. I hope you will take the time to complete this survey.

Sincerely
Investigator's signature\_\_\_\_\_
Date\_\_\_\_\_

This page is to be retained by participant

#### APPENDIX B: LETTER OF INFORMED CONSENT

# UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS

**Researcher:** MRS Palesa Cecilia Mahao – +27 079 814 0357 / +266 58915113 **Supervisor:** Dr Abdul Gani, Tel: +27 031 9022160

Co-supervisor: MRS Gill Marion, Tel: +27 031 260 3380

Research Office: Ms P Ximba 031-2603587

# **CONSENT**

I.....(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

.....

This page is to be retained by researcher

#### **APPENDIX C: QUESTIONNAIRES**

#### Appendix C1: English version

#### UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS

#### **Masters in Business Administration Research Project**

**Researcher:** MRS Palesa Cecilia Mahao – +27 079 814 0357 / +266 58915113 **Supervisor:** Dr Abdul Gani, Tel: +27 031 9022160

Co-supervisor: MRS Gill Marion, Tel: +27 031 260 3380

Research Office: Ms P Ximba 031-2603587

# EMPLOYEES' PERSPECTIVES ON TOTAL QUALITY MANAGEMENT AT QUEEN ELIZABETH II HOSPITAL AND THE NEW REFERRAL HOSPITAL

The purpose of this survey is to request information from you, Queen II Hospital perceptions Employee, regarding your and expectations the on implementation of Total Quality Management (TQM) in the new PPP The information and ratings you provide will help in referral Hospital. identifying the appropriate measures of optimizing TQM in the new PPP Referral hospital. The questionnaire should only take 10 minutes to complete. In this questionnaire, you are asked to indicate what is true for you, so there are no "right" or "wrong" answers to any question. Work as rapidly as you can. If you wish to make a comment please write it directly on the booklet itself. Make sure not to skip any questions.

Thank you for participating.

This questionnaire consists of three sections:

- Section A: The demographic information of the respondents
- Section B: Employees' perceptions about TQM at Queen II hospital
- Section C: Employees' expectations on TQM implementation in new PPP referral hospital

# SECTION A: DEMOGRAPHIC INFORMATION

Please tick in the appropriate box.

1.	Gender:	1 Mal	e	2 Fen	nale		
2.	Age: <25	26-30 2	31-35	36-40		6-50 6	>51 7
3.	Nationality:		Mosothe	1	Other 2		
4.	Highest leveStd 7J.C12			tificate Diplo	oma Degree	Other 6	
5.	Employmen	t category	: (please i	ndicate clearl	y)		
	1. Accounta	ancy					_
	2. Administ	tration					
	3. Clinical						
			-				_
		/rs 6-		ing in this ho 11-15yrs	ospital? 16-20yrs 5	>20y	/rs
~							

# **EMPLOYEES' PERCEPTIONS ABOUT TQM AT QUEEN II HOSPITAL**

- The following statements seek your views on current Total Quality Management at Queen II Hospital.
- Please rate the statements below on a five (5) point-scale by ticking the number that most represent the extent to which you <u>agree</u> or <u>disagree</u> with the statement.
- Important: You are required to make only ONE rating per statement

Rating scales: 1. Strongly Disagree (SD)

- 2. Disgree (D)
- 3. Uncertain (U)
- 4. Agree (A)
- 5. Strongly agree (SA)

# **B1: FOCUS ON STAKEHOLDERS**

# 1. I understand the hospital's objectives

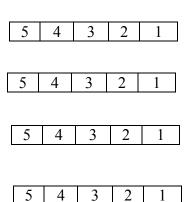
- 2. The hospital objectives are communicated to employees
- 3. The hospital management is sensitive to my needs
- 4. My supervisor is supportive
- 5. My supervisor recognizes my performance
- 6. My performance is appraised
- 7. I am rewarded for good performance
- 8. The work environment is conducive for me to work
- 9. I am provided with adequate resources to perform my daily duties
- 10. The equipment I use is in good condition

SA	A	U	D	SD
5	4	3	2	1
<b></b>				
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1

5

4

- 11. The hospital management understand my training and development needs
- 12. I am given an opportunity to improve my skills through training course
- 13. Hospital management understand patients' healthcare needs
- 14. Hospital management seek feedback from patients on the service provided



# **B2: PARTICIPATION AND TEAMWORK BY EVERYONE IN THE ORGANIZATION**

15. There are clear communication channels within the hospital 16. Information flows from top management down to the employees 17. Information flows both from management and from employees 18. I often get involved in decision-making 19. I am allowed to present my views about my job 20. I am informed about management decision regarding the hospital 21. Hospital management encourages teamwork among Hospital staff 22. Hospital management builds strong work teams 23. My colleagues and I work as a team 24. My colleagues and I share resources 

# **B3: A PROCESS FOCUS SUPPORTED BY CONTINUOUS IMPROVEMENT**

25. Healthcare standards are in place in the hospital

5	4	3	2	1

3

2

1

- 5 4 26. Hospital management ensures that every employee knows the healthcare standards and procedures
- 27. Hospital management monitors compliance with Healthcare standards and procedures

5	4	3	2	1

- 28. The hospital has developed a collaborative care plan
- 29. Hospital management ensures process integration within the hospital
- 30. All hospital processes are integrated
- 31. Work flows well between departments in the hospital
- 32. I fully understand the hospital processes
- 33. The hospital processes are reviewed regularly
- 34. The hospital processes are continuously improved

	5	4	3	2	1
Г	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
					II
	5	4	3	2	1
	5	4	2	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	L				

# **SECTION C**

# EMPLOYEE EXPECTATIONS ON TQM IMPLEMENTATION IN THE NEW PPP REFERRAL HOSPITAL

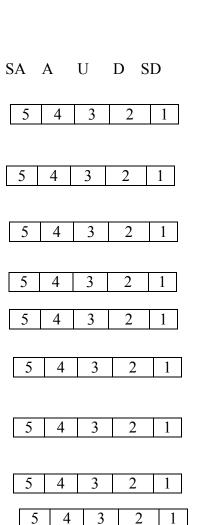
- The following statements seek your expectations on implementation of Total Quality Management in the new PPP referral hospital.
- Please rate the statements below on a five (5) point-scale by ticking the number that most represent the extent to which you **<u>agree</u>** or **<u>disagree</u>** with the statement.
- Important: You are required to make only ONE rating per statement

Scale: 1. Strongly Disagree (SD)

- 2. Disagree (D)
- 3. Uncertain (U)
- 4. Agree (A)
- 5. Strongly agree (SA)

# C1: FOCUS ON STAKEHOLDERS

- 1. The hospital's objectives will be clearly defined
- 2. The hospital's objectives will be communicated to employees
- 3. The hospital management will be sensitive to employees' needs
- 4. Supervisors will be supportive
- 5. Supervisor will recognize employee performance
- 6. Employees' performance will be appraised
- 7. Employees will be rewarded for good performance
- 8. The work environment will be conducive for Employees to work
- 9. Employees will be provided with adequate resources to perform their daily duties



10. The equipment used will be in good condition	5	4	3	2	1
11. The hospital management will understand Employees' training needs	5	4	3	2	1
12. Employees' skills will be improved through training	5	4	3	2	1
13. Hospital management will focus on patients' Healthcare needs	5	4	3	2	1
14. Hospital management will seek feedback	5	4	3	2	1

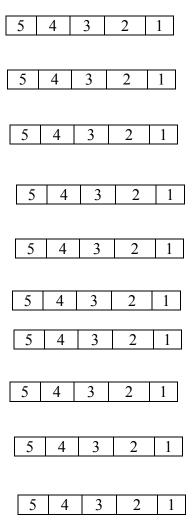
14. Hospital management will seek feedback from patients

# **C2: PARTICIPATION AND TEAMWORK BY EVERYONE IN THE ORGANIZATION**

- 15. There will be clear communication channels within the hospital
- 16. Information will flow from top management down to the employees
- 17. Information will flow both from management and from employees
- 18. Employees will be involved in decisionmaking
- 19. Employees will be allowed to present their views about their job
- 20. Employees will be informed about management decisions
- 21. Hospital management will encourage teamwork among hospital staff
- 22. Hospital management will build strong work teams
- 23. All employees will work as a team
- 24. Employees will share resources

#### C3: A PROCESS FOCUS SUPPORTED BY CONTINUOUS IMPROVEMENT

- 25. Healthcare standards will be put in place in the hospital
- 26. Management will ensure that all employees know healthcare standards and procedures
- 27. Compliance with healthcare standards and procedures will be monitored
- 28. The hospital will have a well-developed collaborative care plan
- 29. Hospital management will ensure process integration within the hospital
- 30. All hospital processes will be integrated
- 31. Work will flow well between hospital departments
- 32. All employees will fully understand the hospital processes
- 33. The hospital processes will be reviewed regularly
- 34. The hospital processes will be continuously improved



#### End of the Questionnaire

#### THANK YOU FOR YOUR PARTICIPATION.

#### **Appendix C2: Sesotho version**

#### UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS

#### **Masters in Business Administration Research Project**

**Researcher:** MRS Palesa Cecilia Mahao – +27 079 814 0357 / +266 58915113 **Supervisor:** Dr Abdul Gani, Tel: +27 031 9022160

Research Office: Ms P Ximba 031-2603587

# MAIKUTLO A BASEBETSI KA TAOLO E PHETHAHETSENG EA BOLENG BA TSEBETSO SEPETLELENG SA QUEEN ELIZABETH II LE SE SECHA

Sepheo sa phuputso ena ke ho kopa maikutlo a hau **ka taolo e phethahetseng ea boleng ba tsebetso sepetleleng sa Queen II le tebello ea hau mabapi le taolo e phethahetseng ea tsebetso sepetleleng se secha.** Maikutlo ao u tla a hlahisa mona a tla thusa ho fumana mekhoa e nepahetseng ea ho phahamisa taolo e phethahetseng ea boleng ba tsebetso sepetleleng se secha. U tla nka metsotso e leshome ho araba lipotso tsena. Lipotsong tsena, u kopuoa ho bontsa seo e leng "nete ka uena, "me ha ho karabo e fosahetseng potsong e feng kapa e feng. Araba ka pele ka moo u ka khonang. U ka fana ka maikutlo a hau hona pampering ena. U koptjoa ho se tlole lipotso.

#### Rea leboha ka ho nka karolo.

Lipotso tsena li arotsoe likarolo tse tharo (3):

- Karolo ea A: Tsebiso ea motho ea arabang lipotso
- Karolo ea B: Maikutlo a basebetsi ka taolo e phethahetseng ea tsebetso sepetleleng sa Queen II
- Karolo ea C: Tebello ea basebetsi ka taolo e phethahetseng ea tsebetson e tlang ho kena tsebetsong sepetleleng se secha

# KAROLO EA A: TSEBISO EA MOTHO EA ARABANG LIPOTSO

U kopuoa ho tsoaea lebokose le nepahetseng.

2. Lilemo:       <25       25-30       31-35       36-40       41-45       46-50         1       2       3       4       5       6	>51
	7
3. Bochaba: Mosotho 1 O mong 2	
4. Maema a ka holimo a thuto:	
Std 7J.C.C.O.S.C.CertificateDiplomaDegreeTse ling1234567	
5,Lefapha la tsebetso: (Bonts'a ka tsela e hlakileng)	
1.Licheleteng	
2. Tsamaisong	
3. Kalafong ea bakuli	
4. Taolong ea basebetsi (HRM)	
5. Lefapha le leng la tsa bophelo (hlakisa)	
6. U na le nako e kae u sebetsa sepetlele moo?	
	0yrs 6

# KAROLO EA B: MAIKUTLO A BASEBETSI KA TAOLO E PHETHAHETSENG EA TSEBETSO SEPETLELE QUEEN II

- Lipolelo tse latelang lii kopa mailutlo a hau ka taolo e phethahetseng ea tsebetso sepetleleng sa Queen II.
- U kopuoa ho bontsa lipolelo tse latelang ka ho ea ka seka sa (5) ka ho tsoaea nomoro e bontsang ho lumellana kapa ho se lumellane le polelo e bontsitsoeng:
- Taba ea bohlokoa: U koptjoa ho tsoaea hang feela polelong ka nngoe.

Sekala : 1. Ha ke lumele ho hang (SD)

- 2. Ha ke lumele (D)
- 3. Ha kena bonnete (U)
- 4. Kea lumela (A)
- 5. Ke lumela ka hohle (SA)

#### **B1: HO SHEBANA LE BOHLE BA NANG LE SEABO**

		SA	Α	U	D	SD
1.	Ke utloisisa sepheo sa sepetlele	5	4	3	2	1
2.	Ho buuoa le nna ka sepheo sa sepetlele	5	4	3	2	1
3.	Baokameli ba sepetlele ba hlokolosi ka litlhoko tsa ka	5	4	3	2	1
4.	Supervisor eaka ea nts'ehetsa	5	4	3	2	1
5.	Supervisor eaka u hlokomela tsebetso eaka	5	4	3	2	1
6.	Tsebetso ea ka ea lekoloa	5	4	3	2	1
7. 8.	Kea putsoa ha ke sebelitse hantle Sebaka sa tsebetso se ntumella ho etsa mosebetsi	5	4	3	2	1
9.	Ke fuoa lisebelisuoa tsohle hore ke etse mosebetsi	5	4	. 3	3 2	2 1

~ .

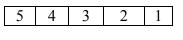
# 10. Lisebelisuoa tseo ke li sebelisang li boemong bo botle

- 11. Bookameli ba sepetlele bo utloisisa litlhoko tsaka tsa ho ntlafatsa litsebo tsaka
- 12. Ke fuoa monyetla oa ho ntlafatsa litsebo tsaka ka ho isoa lithupelong
- 13. Bookameli ba sepetlele bo utloisisa litlhoko tsa bakuli
- 14. Bookameli ba sepetlele bo batla maikutlo a bakuli mabapi le tsebetso eo ba e fumaneng

# **B2: HO NKA KAROLO HA BOHLE LE TSEBELISANO MMOHO**

- 15. Mekhoa ea puisano e hlakile ka hara sepetlele 16. Litaba li tloha holimo ho baokameli li tla tlase 17. Litaba li tloha ho baokameli le ho basebetsi 18. Ha ngata ke ba teng likopanong le lipuisanong 19. Ke lumelloa ho hlahisa maikutlo ka mosebetsi oa ka 20. Ke tsebisoa ka merero ea bookameli mabapi le sepetlele 21. Bookameli ba sepetlele bo khothaletsa basebetsi ho tsoarana ka matsoho mosebetsing 22. Bookameli ba sepetlele bo bopa sepane se matla sa basebetsi
- 23. Basebetsi mmoho le nna re sebetsa re le ntho e le ngoe
- 24. Nna le basebetsi mmoho re arolelana lisebelisoa

# 5 4 3 2 1 5 4 3 2 1



5	4	3	2	1

#### B3: HO SHEBANA LE MOKHOA OA TSEBETSO LE HO TSOELA PELE HO

#### NTLAFATSA

- 25. Manane a tsela ea tsebeletso ea bophelo a lateloa sepetlele
- 26. Bookameli ba sepetlele bo netefatsa hore basebeletsi bohle ba tseba manane a tsebeletso tsa bophelo
- 27. Bookameli ba sepetlele bo sala morao manane a tsebeletso tsa sepetlele
- 28. Sepetlele sena le meralo ea tsebelisano kalafong ea bakuli
- 29. Bookameli ba sepetlele bo netefatsa mokhoa oa tsebetso o kopanetsoeng ka hara sepetlele
- 30. Mokhoa oa tsebetso oa sepetlele o kopane
- 31. Mosebetsi o phaalla hantle pakeng tsa mafapha ohle a sepetlele
- 32. Ke utloisisa mokhoa oa tsebetso oa sepetlele
- 33. Mokhoa oa sepetlele oa tsebetso o hlahlojoa khafetsa
- 34. Mokhoa oa sepetlele oa tsebetso o ntlafatsoa kamehla

	5	4	3	2	1
)	5	4	3	2	1
e	5	4	3	2	1
ng	5	4	3	2	1
ba	5	4	3	2	1
	5	4	3	2	1
a	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1

# KAROLO EA C

# LITEBELLO TSA BASEBETSI KA TAOLO E PHETHAHETSENG EA BOLENG BA TSEBETSO SEPETLELENG SE SECHA

- Lipolelo tse latelang lii kopa mailutlo a hau ka taolo e phethahetseng ea tsebetso sepetleleng sa Queen II.
- U kopuoa ho bontsa lipolelo tse latelang ka ho ea ka seka sa (5) ka ho tsoaea nomoro e bontsang ho lumellana kapa ho se lumellane le polelo e bontsitsoeng:
- Taba ea bohlokoa: U koptjoa ho tsoaea hang feela polelong ka nngoe.

Sekala : 1. Ha ke lumele ho hang (SD)

- 2. Ha ke lumele (D)
- 3. Ha kena bonnete (U)
- 4. Kea lumela (A)
- 5. Ke lumela ka hohle (SA)

#### C1: HO SHEBANA LE BOHLE BA NANG LE SEABO

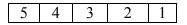
		SA	Α	U	D	SD
1.	Ke tla utloisisa sepheo sa sepetlele	5	4	3	2	1
2.	Ho tla buuoa le nna ka sepheo sa sepetlele	5	4	3	2	1
3. lit	Baokameli ba sepetlele ba tla ba hlokolosi ka lhoko tsa ka	5	4	3	2	1
4.	Ke tla putsoa ha ke sebelitse hantle	5	4	3	2	1
5.	Sebaka sa tsebetso se tla ntumella ho etsa mosebetsi	5	4	3	2	1
6.	Ke tla fuoa lisebelisuoa tsohle hore ke etse mosebetsi	5	4	3	2	1
7.	Lisebelisuoa tseo ke tla li sebelisa li tla ba boemong bo botle	5	4	3	2	1
8.	Baokameli ba sepetlele ba tla utloisisa litlhoko tsaka tsa ho ntlafatsa litsebo tsaka	5	4	3	2	2 1

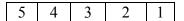
# 9. Ke tla fuoa monyetla oa ho ntlafatsa litsebolitsebo tsaka ka ho isoa lithupelong

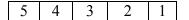
- 10. Baokameli ba sepetlele ba tla utloisisa litlhoko tsa bakuli
- 11. Baokameli ba sepetlele ba tla batla maikutlo a bakuli mabapi le tsebetso eo ba e fumaneng

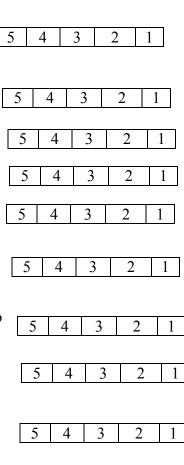
# C2: HO NKA KAROLO HA BOHLE LE TSEBELISANO MMOHO

- 12. Mekhoa ea puisano e tla hlaka ka hara sepetlele
- 13. Litaba li tla tloha holimo ho baokameli li tle tlase
- 14. Litaba li tla tloha ho baokameli le ho basebetsi
- 15. Ke tla ba teng likopanong le lipuisanong
- 16. Ke tla lumelloa ho hlahisa maikutlo ka mosebetsi oa ka
- 17. Ke tla tsebisoa ka merero ea bookameli mabapi le sepetlele
- 18. Bookameli ba sepetlele bo tla khothaletsa basebetsi ho tsoarana ka matsoho mosebetsing
- 19. Bookameli ba sepetlele bo tla bopa sepane se matla sa basebetsi
- 20. Basebetsi mmoho le nna re tla sebetsa re le ntho e le ngoe
- 21. Nna le basebetsi mmoho re tla arolelana lisebelisoa











# C3: HO SHEBANA LE MOKHOA OA TSEBETSO LE HO TSOELA PELE HO NTLAFATSA

- 22. Manane le tsela ea tsebeletso ea tsa bophelo a tla lateloa sepetlele
- 23. Bookameli ba sepetlele bo tla netefatsa hore basebeletsi bohle ba tseba manane a tsebeletso tsa bophelo
- 24. Bookameli ba sepetlele bo tla netefatsa hore basebeletsi bohle ba ikamahanya le tsela ea tsebetso
- 25. Sepetlele se tla ba le meralo ea tsebelisano kalafong ea bakuli
- 26. Bookameli ba sepetlele bo tla netefatsa mokhoa oa tsebetso o kopanetsoeng ka hara sepetlele
- 27. Mokhoa oa tsebetso oa sepetlele o tla kopana
- 28. Mosebetsi o tla phaalla hantle pakeng tsa mafapha ohle a sepetlele
- 29. Ke tla utloisisa mokhoa oa tsebetso oa sepetlele
- 30. Mokhoa oa sepetlele oa tsebetso o tla hlahlojoa khafetsa
- 31. Mokhoa oa sepetlele oa tsebetso o tla ntlafatsoa kamehla

	5 4	4	3	2 1	l
	5	4	3	2	1
	5	4	3	2	1
5	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1

# QETELLO

# **REA LEBOHA**