

**AN AUDIT TOOL FOR RELICENSING INSPECTION TO  
ASSESS QUALITY AND PATIENT SAFETY IN ETHEKWINI  
PRIVATE HOSPITALS**

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## Declaration

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or for any other purpose.

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Signature of student

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# **Abstract**

## **Background**

In South Africa, the National Core Standards are advocated as the cornerstone for improving quality and patient safety in health care organisations. To align to the Department of Health's legislative and policy mandates, the Office of Health Standards Compliance developed the National Core Standards for Health Establishments in South Africa that provide a benchmark of quality of care against which the delivery of health services can be monitored. Through the implementation of the National Core Standards (NCS), an assessment of a health facility's compliance to service standards can be measured.

## **Aim**

The aim of this study was to develop an audit tool for relicensing inspection to assess quality and patient safety in eThekweni private hospitals

## **Methodology**

An exploratory sequential mixed methods research design was used to assess nursing staff perceptions regarding the current relicensing audit process and the existence of best practice standards in (n=4) private hospitals in eThekweni district. A purposive sampling technique was employed to recruit clinical managers in the qualitative phase of the study. A total of (n=24) participants were interviewed from approximately 40 clinical managers, guided by data saturation; (n=9) from Hospital A, (n=7) from Hospital B, (n=5) from Hospital C and (n=3) from Hospital D. The clinical managers are the unit managers (middle management) and nursing services managers (higher management) in charge of all clinical services in the hospital and are directly involved in relicensing inspections. In the quantitative phase of the study, a simple random sampling technique was employed to include nursing staff in direct contact with the patients. The total population of nurses was 569 of which 270 were sampled for the study. The approach adopted for qualitative data analysis was an inductive approach. The concepts identified were

translated into codes, then codes translated into themes and categories. The themes according to which data was organised were based on the conceptual framework that guided the study. The quantitative data was analysed using version 23.0 of the Statistical Package of Social Services. In the documentation review phase a total of 59 documents were reviewed from each hospital, amounting to 236 documents. Quantitative content analysis was used to analyse the documentation using a deductive approach. The goal was to identify important themes or categories within the content of the documents that corroborated with findings of both phases of the study and as related to the NCS and the Batho Pele principles.

## **Results**

The results of the study showed that the participant private hospitals in eThekweni district have not fully implemented the approach to practice standards and healthcare audits in relation to three clinical domains of the National Core Standards and the Batho Pele Principles. Although best practice policies and procedures exist in private hospitals in eThekweni district, the results of the study showed that there is inconsistent checking of the clinical domains in the participant hospitals during relicensing inspections. Recommendations from participants for a standardised audit process led to the development of an audit tool for relicensing inspections based on the National Core Standards and the Batho Pele Principles for private hospitals in eThekweni district.

**Key words:** Audit tool, best practices, healthcare, patient care, patient rights, support services, relicensing inspections.

## **Dedication**

This study is dedicated to my late husband, Mr Danny Chellan who I dearly miss and will always love and remember forever. He would have been extremely proud of my efforts and achievement as he was my strength and support throughout my nursing career. I also dedicate this study to my two loving sons Faiz and Aaqib Chellan and daughter-in law, Johara Chellan, my beautiful grandson Junaid Chellan and wonderful nephew Mohammed Azdeen Bhika whom I adore very much.

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## Glossary of Terms

**Accreditation:** a formal process carried out by a recognised body involving detailed and critical assessment of all aspects of a healthcare facility against a predetermined set of standards and criteria. The facility is then scored as being compliant, partially compliant or non-compliant with the standards, and awarded accreditation if found to comply with standards to a substantial degree. Follow-up surveys are conducted at predetermined times to ensure that standards are maintained (Whittaker *et al.* 2011: 60).

**Batho Pele Principles:** Batho Pele is a Sesotho phrase, which means “People First”. It is an initiative that was launched in 1997 to transform the Public Service at all levels. Batho Pele was launched because democratic South Africa inherited a Public Service that was not people-friendly and lacked the skills and attitudes to meet the developmental challenges facing the country (Republic of South Africa 1997: 6).

**Certification:** a process by which a recognised authority, either a governmental agency or nongovernmental organisation, evaluates and recognises an individual provider or an organisation as having met predetermined requirements, usually to demonstrate competence in a specialty area. Certification generally implies a specialisation in a single technical area, while accreditation reflects overall facility performance and competence. Certification and accreditation are voluntary processes undertaken by a provider or a facility to demonstrate special competence or capability beyond the minimum required for licensure (Whittaker *et al.* 2011: 60).

**Continuous quality improvement:** differs from quality, as it aims to identify performance gaps between actual service delivery and the expectations of services. It is based on the principles of quality management and continually strives to achieve a standard of excellence in a healthcare system over time. If an organisation is to improve, it must undergo change, but not all changes

bring about improvement. Changes must therefore be tested for their potential to improve quality of care and the performance of the different services and divisions within healthcare establishments (Whittaker *et al.* 2011: 60).

**Domain:** The National Core Standards are structured into seven cross-cutting domains with a domain being defined by the World Health Organisation “as an area where quality or safety might be at risk”. Their layout is deliberate, in that the first three domains (Patient Rights, Safety, Clinical Governance and Care, and Clinical Support Services) are those domains that are involved directly with the core business of the health system of delivering quality health care to users or patients. The remaining domains (Public Health, Leadership and Corporate Governance, Operational Management, and Facilities and Infrastructure) are essentially the support system that ensures the system delivers its core business (Department of Health 2011:10).

**Evidence-based practice (EBP):** the conscientious use of current best evidence in making clinical decisions about patient care, it is a clinical problem-solving strategy that de-emphasises decision-making based on custom and emphasises the integration of research evidence with clinical expertise and patient preferences (Polit and Beck 2014: 62).

**Health audit:** a methodologically unbiased examination of health establishments by comparing what is done with agreed best practice and identifying and resolving problems in healthcare service delivery (Department of Health 2012: 9).

**Licensing:** a statutory mechanism by which a governmental authority grants permission to a healthcare organisation to operate and deliver services. Licensing allows governments to ensure basic public health and safety by controlling the entry of healthcare providers and facilities into the healthcare market and by establishing standards of conduct for maintaining that status (Whittaker *et al.* 2011: 60). Relicensing takes place at regular intervals.

**National Core Standards:** In fulfilling its strategic and legislative imperatives, the Office of Standards Compliance developed the National Core Standards for Health Establishments in South Africa, which assist in setting the benchmark of quality care against which delivery of services can be monitored (Department of Health 2011: 8).

**Quality:** in health care this refers to the extent to which an organisation meets its clients' needs and expectations. It is a complex, multifaceted concept which can be assessed and measured against predetermined standards (Whittaker *et al.* 2011: 60).

**Quality assurance:** meeting the needs and expectations of the patient and the community. Quality assurance focuses on systems and processes and uses data to analyse service delivery processes that encourage a team approach to problem solving and quality improvement (Whittaker *et al.* 2011: 60).

**Standards:** statements that define the required key functions, activities, processes and structures so that various departments in a facility can provide quality services. Standards are determined by professional bodies, healthcare professionals, staff, patients and citizens, and should be regarded as optimal and achievable, and should be designed to encourage continuous improvement (Whittaker *et al.* 2011: 60).

**Sub-domain:** Within each domain are sub-domains which further break down the domains into sub-sections or critical areas, which together describe the scope of that domain (Department of Health 2011: 10).

## List of Acronyms

<b>Acronym</b>	<b>Full word/sentence</b>
APPG	All Party Parliamentary Group
BPPR	Best Practice Patient Rights
BPPC	Best Practice Patient Care
BPSS	Best Practice Support Services
CLABSI	Central Line Arterial Blood Stream Infection
CPD	Continuous Professional Development
CUSP	Comprehensive Unit Based Safety Programme
CRE	Carbapenem-Resistant Enterobacteriaceae
COHSASA	Council for Health Service Accreditation of Southern Africa
EBP	Evidence-Based Practice
EPUAP	European Pressure Ulcer Advisory Panel
HSE	Health Service Executive
HEN	Health Electronic Network
HCAI	Healthcare-Associated Infection
ICU	Intensive Care Unit
IHI	Institute for Healthcare Improvement
IPSG	International Patient Safety Goals
IOM	Institute of Medicine
ISO	International Standards Organisation
JCI	Joint Commission International
MTSF	Medium Term Strategic Framework
MEC	Member of the Executive Council
MDR	Multiple Drug Resistant
NSDA	National Service Delivery Agreement
NCS	National Core Standards
NDP	National Development Plan
NHI	National Health Insurance
NHS	National Health System

NPUAP	National Pressure Ulcer Advisory Panel
OHSC	Office of Health Standards Compliance
POPI	Protection of Personal Information Act
P1	Priority One
P2	Priority Two
P3	Priority Three
PTB	Pulmonary Tuberculosis
PTC	Pharmaco-Therapeutic Committee
PC	Patient Care
PPE	Personal Protective Equipment
PHC	Primary Health Care
QMS	Quality Management System
SANC	South African Nursing Council
SCIP	Surgical Care Improvement Project
SHEA	Society for Healthcare Epidemiology of America
SSI	Surgical Site Infection
SS	Support Service
UTI	Urinary Tract Infection
VAP	Ventilator Acquired Pneumonia
VTE	Venous Thromboembolism
XDR	Extreme Drug Resistance

# **CHAPTER 1: OVERVIEW OF THE STUDY**

## **1.1 INTRODUCTION**

In recent years, the South African Department of Health has shown an unwavering commitment to improving the quality of health care in South Africa. This commitment has been further cast into the spotlight through the publication of the 10-Point Plan for improvement of the health sector (2012-2014) in July 2010 (Whittaker *et al.* 2011: 60). With the onset of the quality movement in the health care sector, a growing interest in the evaluation of the quality of health services has been noted. Licensure, accreditation, and certification are systems available to meet the need for quality and performance information. The Department of Health is the custodian of health care delivery in South Africa. This includes care delivered at public as well as private facilities. This responsibility is devolved to the provincial departments. According to the Minister of Health, Dr Motsoaledi, the importance of providing quality health services is non-negotiable (Department of Health 2011: 5a). Better quality of care is fundamental in improving South Africa's current poor health outcomes and in restoring patient and staff confidence in public and private healthcare (Department of Health 2011: 5a).

Quality of care is best achieved if the structure of the health care facilities facilitates optimal delivery. The regulation pertaining to licensing and control of private hospitals is Regulation 158 (R158) (Department of Health 1996: 1). Revision of the document to keep it up to date with developments in the field is the responsibility of the Department of Health. Private hospitals will only be licensed if they show a high level of compliance with R158. The Office of Health Standards Compliance (OHSC) was established as a step along the path towards universal healthcare coverage and improvement in the quality of care in South African hospitals. The OHSC was established by the National Health Amendment Act of 2013 and, in terms of section 78 of the Act, the objects of the Office are to protect and promote the health and safety of users

of health services (Department of Health 2013: 8). The OHSC has co-ordinated the development of a comprehensive set of National Core Standards (NCS) for Health Establishments in South Africa (Department of Health 2011: 9-13; Republic of South Africa 2017a: 1-48). The NCS have been expressly created as a statement of what is expected and required to deliver safe quality care. Through a national process of certification, an external body formally assesses each health establishment for compliance against these NCS and the six fast tracked standards (Department of Health 2011:6a). The assessment of quality healthcare in public sector hospitals also includes the evaluation of public hospitals against Batho Pele transformation principles (Republic of South Africa 1997: 6). Detailed tools for measuring compliance with the NCS and Batho Pele principles have been developed and health establishments in the public sector have begun to self-evaluate using these tools.

## **1.2 BACKGROUND TO THE STUDY**

The link between quality of healthcare services, patient safety and health system performance is a subject of great interest to many researchers and research institutions. This link is a theoretical construct that needs to be well understood by both policy makers and health system managers because such people deal with issues that emanate directly or indirectly from this link on a daily basis. It is, therefore, hoped that this study will provide some insight into this intricate relationship. It is also hoped that the study will positively influence policy development and implementation in this area.

Currently there is no audit tool for evaluation of clinical practice standards in private hospitals in eThekweni district and measurements vary between hospitals and hospital groups. While the structural audit tool R158 is known to the private sector, no similar tool exists for the measurement of clinical practice standards for private hospitals in eThekweni district (Department of Health 1996: 1). Furthermore, the current audit tools of the NCS and Batho Pele principles focuses mainly on the public sector model of quality and

patient safety. The Director of OHSC in South Africa noted that NCS for both private and public health establishments were set in advance of the introduction of the National Health Insurance (NHI) system (Bateman 2011: 294-296). To date and five years since its implementation in the public sector, very little is known about this national audit tool and the method used to evaluate quality and patient safety standards in private hospitals in eThekwin district.

With the evolution of state legislation and programmes to improve quality and patient safety in South Africa it is imperative to develop a common audit tool for clinical practice audits at public and private hospitals to ensure regulatory compliance during certification or relicensing inspections. Private hospitals are mainly regulated in terms of licensing requirements implemented at the provincial level. This form of regulation is limited to ensuring that hospital facilities meet quality standards as determined by the Department of Health. Inspections are conducted at the provincial level and a recommendation is made for the licence to be issued or declined.

The implementation of quality, patient safety and infection control at private hospitals has been left to the discretion of each hospital, with the establishment of elaborate structures and committees and other initiatives based on the World Health Organization (WHO) surveillance and other quality models. Section 47 of the National Health Act makes reference to evaluating services of health establishments, namely that all health establishments must comply with the quality requirements and standards prescribed by the Minister (Department of Health 2003: 67). These quality requirements and standards may relate to human resources, health technology, equipment, hygiene, premises, and the delivery of health services, business practices, safety and the manner in which users are accommodated and treated.

In South Africa, the introduction and adoption of the Batho Pele principles (Republic of South Africa 1997: 1-18) and the Patient Rights Charter (Republic of South Africa Act 1996b: 7-39) as well as the enactment of the



OHSC and the NCS (Department of Health 2013: 1-89) have further enhanced expectations of the community that the private sector service will be more accountable and consumer friendly. These initiatives of the government have increased the expectations of both the providers and recipients of healthcare services. It is therefore important to understand that the value that communities seek to gain from the investment in private hospitals lies in the improvement of patient safety, improved quality of healthcare services and improved overall performance of hospitals. For this reason, it is understandable why there is an increased public outcry when clinical incidents and adverse events emanating from hospitals are revealed in the public domain. The manner in which these clinical incidents and adverse events are reported by the media is hardly sympathetic to these hospitals and is often used to tarnish their image. The researcher intends, through this study, to develop an audit tool for regulatory relicensing inspections for private hospitals in eThekweni district to ensure quality and patient safety standards are adequately checked in a consistent manner.

### **1.3 LICENSURE OF HEALTHCARE ORGANISATIONS**

According to Zeribi and Marquez (2005: 11), three main approaches to quality regulation have been used by governments and professional bodies to ensure, maintain, and improve the quality of healthcare, namely: licensing, certification, and accreditation.

*Licensing* is a statutory mechanism by which a governmental authority grants permission to an individual practitioner to engage in an occupation or to a healthcare organisation to operate and deliver services. Licensing allows governments to ensure basic public health and safety by controlling the entry of healthcare providers and facilities into the healthcare market and by establishing standards of conduct for maintaining that status.

*Accreditation* on the other hand is a formal process carried out by a recognised body, and involves detailed and critical assessment of all aspects

of a healthcare facility against a predetermined set of standards and criteria. The facility is then scored as being compliant, partially compliant or non-compliant with the standards, and awarded accreditation if found to comply with standards to a substantial degree. Follow-up surveys are conducted at predetermined times to ensure that standards are maintained.

*Certification* is a process by which a recognised authority, either a governmental agency or nongovernmental organisation, evaluates and recognises an individual provider or an organisation as having met predetermined requirements, usually to demonstrate competence in a specialty area. Certification generally implies a specialisation in a single technical area, while accreditation reflects overall facility performance and competence. Certification and accreditation are voluntary processes undertaken by a provider or a facility to demonstrate special competence or capability beyond the minimum required for licensure.

Clearly then, a need exists for an objective way of measuring clinical performance of private hospitals using an appropriate audit tool. There is a close relationship between hospital performance measurement and quality improvement which emanates from the basic premise that when you start measuring the clinical performance of a hospital you will discover areas of concern, and in addressing these concerns the overall quality of the healthcare service will improve. This connection between the overall organisation performance and quality means that any tools used to improve the quality of the hospital healthcare services will provide a measure of how well the hospital is performing. An interesting and unsurprising finding is that performance measurements in hospitals and quality improvement are so interrelated that it is impossible to measure one without the other (Kabane 2013: 1-32).

## 1.4 CLINICAL AUDITS

The Commission on Patient Safety and Quality Assurance in the United Kingdom (UK) defines clinical audit as “a clinically led, quality improvement process that seeks to improve patient care and outcomes through the systematic review of care against explicit criteria and to act to improve care when standards are not met” (Health Service Executive [HSE] 2013: 7). The Commission also recognises clinical audit as a key and essential component of clinical governance stating that it “constitutes the single most important method which any healthcare organisation can use to understand and ensure the quality of the service that it provides”. (HSE 2013: 7). Clinical audit is a cyclical process which can be outlined in five stages as outlined in Figure 1.1.



**Figure 1.1: The five-stage approach to clinical audit**

Source: Health Service Executive (HSE) (2013: 11)

### 1.4.1 Stage 1: Planning for audit

According to Health Service Executive Report (HSE 2013: 12-65) there are 5 stages to audit planning. If a clinical audit is to be successful in identifying areas of excellence or areas for improvement, it requires effective planning

and preparation. The amount of planning and preparation will depend on the specific circumstances of each audit.

#### **1.4.2 Stage 2: Standard/criteria selection**

Clinical audit should be selected with a view to improving the quality or safety of care or of service provision which may relate to the structure, process or outcomes.

*Structure:* resources required to deliver care; environment in which care is delivered; facilities made available (e.g. availability of single rooms); equipment made available (e.g. resuscitation equipment); and documentation of policies, procedures, protocols and guidelines.

*Process:* the procedures and practices implemented by staff in the prescription, delivery and evaluation of care – these may be specific to the clinical process or service or administrative processes.

*Outcomes:* the effect of care received by service users as a result of healthcare provision and the costs to the service of providing care i.e. the result of clinical interventions.

Standards should be robust and evidence-based as noted by the Health Service Executive Report (HSE), in the UK (Health Service Executive [HSE] 2013: 22). Useful sources for standards in the report include:

- Local standards in the form of evidence-based guidelines;
- Nationally endorsed clinical guidelines;
- Standards and clinical guidelines from relevant quality and safety programmes, clinical care programmes and professional bodies; and
- Clinical guideline development organisations' such as National Institute for Clinical Excellence (NICE) and Joint Commission International (JCI).

### **1.4.3 Stage 3: Measuring performance**

Measuring performance begins with data collection followed by data analysis, drawing of conclusions, and presentation of results. After the results have been compiled and the data has been analysed against the standards, the final step in the process (where necessary) is to identify the reasons why the standard was not met. In order to understand the reason for failure to achieve compliance with clinical audit criteria, the audit team should carefully review all findings.

### **1.4.4 Stage 4: Making improvements**

A clinical audit can be identified as a change process. An audit that simply measures but does not drive change to address problems identified is not a good audit. Ashmore, Ruthven and Hazelwood (2011a: 81-92) argue that all good audit projects must include a programme of change activity and post-identification of the findings from the audit, to ensure that necessary changes happen. All audit reports should be shared with the service, specifically with the relevant Head of Department, Head of Service and Governance Group for review and action. Quality improvement plans should be time limited with clear milestones and concrete recommendations. Responsibilities for implementing tasks or actions should be clearly allocated to staff that carry the necessary authority to effect such change.

### **1.4.5 Stage 5: Sustaining improvements**

The audit cycle is a continuous process. A complete audit cycle as described by Ashmore, Ruthven and Hazelwood (2011b: 93-106) ideally involves two data collections and a comparison of one with the other following implementation of change after the first data collection, in order to determine whether the desired improvements have been made. Further cycles may be necessary if performance still fails to attain the levels set at the outset of the audit. At this stage there may be justification for adjusting the desired performance levels in the light of the results obtained. It is also recommended

that the quality of an audit programme is evaluated as part of the wider quality and risk management agenda. Service providers should assess their structures, processes, outcomes and resources for audit activities. All clinical audits should be conducted in a manner that complies with legislation, guidance and service provider policies relating to confidentiality and data protection.

## **1.5 QUALITY AND PATIENT SAFETY**

Quality in health care refers to the extent to which an organisation meets its client's needs and expectations. It is a complex, multifaceted concept which can be assessed and measured against predetermined standards (Whittaker *et al.* 2011: 60). Many view quality health care as the overarching umbrella under which patient safety resides. For example, the Institute of Medicine (IOM) report, considers patient safety "indistinguishable from the delivery of quality health care" (Kohn, Corrigan and Donaldson 1999: 4). Patient safety practices have been defined as "those that reduce the risk of adverse events related to exposure to medical care across a range of diagnoses or conditions" (Mitchell 2008: 4). Practices considered to have sufficient evidence to include in the category of patient safety practices include appropriate use of prophylaxis to prevent venous thromboembolism (VTE) in patients at risk, use of maximum sterile barriers during invasive procedures (for example while placing central intravenous catheters to prevent infections), appropriate use of antibiotic prophylaxis in surgical patients to prevent postoperative infections, asking that patients recall and restate what they have been told during the informed-consent process to verify their understanding, the use of risk assessment tools for the prevention of pressure ulcers and patient falls.

Despite the many definitions of quality and patient safety, the bottom line is that the need for quality and safety of care is at the heart of all clinical relicensing inspections. Quality and patient safety is the responsibility and

accountability of national government, all healthcare providers, clinicians, managers and leaders in healthcare organisations.

## **1.6 NURSING AS THE KEY TO IMPROVING QUALITY THROUGH PATIENT SAFETY**

Nursing has clearly been concerned with defining and measuring quality long before the current national and state-level emphasis on quality improvement. Florence Nightingale analysed mortality data among British troops in 1855 and accomplished significant reduction in mortality through organisational and hygienic practices. She is also credited with creating the world's first performance measures of hospitals in 1859 (Mitchell 2008: 4; Burns and Grove 2011: 34). In the past, nursing responsibility in patient safety was viewed within narrow aspects of patient care, for example, avoiding medication errors and preventing patient falls. While these dimensions of safety remain important within the nursing purview, the breadth and depth of patient safety and quality improvement are far greater. The most critical contribution of nursing to patient safety, in any setting, is the ability to coordinate and integrate the multiple aspects of quality within the care directly provided by nursing and across the care delivered by others in the setting.

Further, when the key role of communication or communication lapses are considered in the commission of error, the role of nursing as a prime communication link in all health care settings becomes evident. The definition of "error chain" at Patient Safety Net (PSNet) at the Agency of Healthcare Research and Quality (AHRQ) clearly indicates the role of leadership and communication in the series of events that leads to patient harm. Root-cause analysis of errors is frequently recommended to provide categories of linked causes including failure to follow standard operating procedures, poor leadership, breakdowns in communication or teamwork, overlooking or ignoring individual fallibility and losing track of objectives (Agency of Healthcare Research and Quality [AHRQ] 2009: 1; Mitchell 2008: 2).

Therefore, through the process of regulatory relicensing inspections, work environments for nurses that are most conducive to patient safety and quality may be improved in terms of how work is designed, how personnel are deployed, and how the very culture of the organisation understands and acts on the science of safety (Page 2008: 4). These changes require leadership capable of transforming not just physical environments, but also the beliefs and practices of nurses and other health care workers providing patient care. System changes are also required by those who establish policies and best practices that shape those environments and the individuals who constitute the management of the organisation. Relicensing inspections need to take into account a standardised approach throughout the evaluation process and balance the tension between clinical practice audits and their impact with appropriate levels of trust and support so as to simultaneously create environments of learning.

## **1.7 PROBLEM STATEMENT**

To date and five years since its implementation in the public sector, very little is known about the national audit tool and the method used to evaluate quality and patient safety standards in private hospitals in eThekweni district. Furthermore, there is no audit tool available to evaluate clinical practice standards in private hospitals in eThekweni district and, as a result, measurements vary between hospitals and hospital groups. While the structural audit tool using R158 is known to the private sector, no such tool exists for the measurement of clinical practice standards for private hospitals in eThekweni district (Department of Health 1996:1). Furthermore, the current audit tool of the NCS and Batho Pele principles focuses mainly on the public sector model of quality and patient safety, for example (measurements of waiting times for surgery, medication and OPD queuing times.). These are not issues of concern in private sector hospitals. The current audit process also does not include contemporary evidence-based clinical practice audits. Kabane (2013: 24) noted that the most predominant use of patient safety in South Africa still refers to physical safety in hospital settings compared to the



wider interpretation of the concept internationally. With this in mind, the current research focused on developing a clinical audit tool using contemporary evidence-based clinical practice guidelines for relicensing inspections of private hospitals in eThekweni district. The audit tool is meant to complement the clinical domains of the NCS and the Batho Pele principles which represents the core business of the health system in delivering quality health care to patients and its users of the service (Department of Health 2011: 10-18a). The audit tool developed is a matrix of healthcare clinical performance domains which can be compared against a set of current evidence-based practice standards and criteria measuring clinical outcomes in private hospitals in eThekweni district. Braithwaite, Healy and Dwan (2005: 7) focused on responsive regulation and they maintained that regulators are more likely to succeed by using mechanisms that are responsive to the context, conduct and culture of those being regulated. According to the WHO, the implementation of audit and feedback requires clear goals and a thorough analysis of the health care environment in question, especially if this approach is combined with incentives or penalties or is made mandatory (World Health Organization [WHO] 2010: 8).

In private hospitals where the study will be conducted, notification of annual relicensing audits is communicated by means of e-mail informing hospital management about six weeks in advance of an audit visit. This involves an audit of waste disposal certificates, job descriptions for staff, proof of mock resuscitations, proof of fire drills conducted, clinical incident file, overtime policy, proof of South African Nursing Council (SANC) registration, staff orientation, in-service programme, and generator service records. There are no measurable elements for these standards and the expectations of the regulator are unknown prior to the inspection. There is no formal programme outlined and on the day of the inspection the process begins with a review of all the requested documentation. The review of the requested files is done through a browsing session and may take only a few minutes. This is followed by a walkabout by two teams namely a structural and a nursing team. While all these steps are critical to ensure continuous quality improvement and safe

quality practices in private hospitals, there are no evidence-based guidelines used as auditable standards that can trace back to the measurable elements of care expected by the regulator. An average of about three hours is spent on clinical practice audits in the wards with immediate feedback during the audit and a wait of about six weeks for formal feedback in writing. The licence issued or renewed is valid for a year. Due to the lack of a clinical audit tool at relicensing inspections valid concerns are raised relating to the outcome of the audits. A standardised audit tool will provide for a more meaningful inspection with valuable feedback for quality improvement. The advantage of a standardised audit tool is that it will provide an opportunity to benchmark outcomes of high-risk clinical practices in the private sector both nationally and internationally. Private hospitals with low compliance rates can benchmark themselves in relation to high performing hospitals or groups and learn from each other through networking and dissemination of information that is evidence-based. The regulator will achieve its objectives of ensuring that at least minimal levels of quality health services are maintained at private hospitals in eThekweni district in a consistent way. The need for continuous quality improvement and successful relicensing on an annual basis is the key to success and survival of private hospitals in a very competitive healthcare environment. The challenge in this study, therefore, included assessing the perceptions of nursing staff regarding the current relicensing audit process and to identify what current quality and patient safety standards existed in private hospitals for clinical evaluation.

## **1.8 AIM OF THE STUDY**

The study aimed to develop an audit tool for relicensing inspection to assess quality and patient safety in eThekweni private hospitals.

## **1.9 OBJECTIVES OF THE STUDY**

The objectives of the study were to:

- Assess nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections for private hospitals in relation to the clinical domains of the NCS and the Batho Pele principles.
- Assess evidence-based best practice standards and their outcomes in selected private hospitals in eThekweni district and how these contribute to the delivery of quality healthcare to patients and users of the service.
- Develop an audit tool for relicensing inspection of private hospitals in eThekweni district based on the clinical domains of the NCS and Batho Pele principles.

## **1.10 RESEARCH QUESTIONS**

- What are the perceptions of nursing staff regarding the current relicensing audit tool in relation to the clinical domains of the NCS and Batho Pele principles?
- What evidence-based best practice standards exist in the selected private hospitals in eThekweni district, and do they contribute to the delivery of quality health services for patients and users of the service?
- How can an audit tool for clinical relicensing inspections for private hospitals in eThekweni district be developed based on the clinical domains of the NCS and Batho Pele principles?

## **1.11 SIGNIFICANCE OF THE STUDY**

This study offers new knowledge of the current quality and patient safety initiatives undertaken at private hospitals in eThekweni district. It also highlights the clinical structure, processes and outcomes of quality measures undertaken at private hospitals that can be included in an audit tool for regulatory relicensing inspections. Using evidence-based best practice audit tools in a standardised way enhances learning and contributes to patient safety and quality improvements. Literature reviewed suggests that there are

gaps between public and private sector regulatory relicensing inspections in eThekweni district (Department of Health 2012: 1-67; Kabane 2013: 1-32).

It is difficult to explain the exact measures of quality and patient safety variations within private hospitals without a standardised audit tool for evaluation. The researcher was therefore keen to identify the levels of variations of quality and patient safety standards at eThekweni district private hospitals with the aim of developing an audit tool with which quality and patient safety can be assessed in a uniform manner during relicensing inspections. The subject of quality, patient safety, hospital performance measurements and assessments are wide, with multiple approaches. Therefore, although the agreement about the need for quality improvement is almost universal, the means of achieving effective improvement in overall care is still not well understood (Glickman *et al.* 2007: 341-348). What is clear is that regulators are more likely to succeed by using mechanisms that are responsive to the context, conduct, and culture of those being regulated (Braithwaite, Healy and Dwan 2005: 7).

This emotionally charged issue of relicensing inspections for private hospitals in eThekweni district and the manner in which the clinical component of the relicensing audits take place, and the accompanying despair that often accompanies these audits, stimulated the researcher's interest in this topic. The fact that there is very little published research on relicensing inspections on patient safety and health care quality in South Africa motivated the researcher to undertake this study in order to contribute new knowledge in this very important area of health care systems.

## **1.12 OUTLINE OF THE THESIS**

### **Chapter 1: Overview of the study**

Introduces and provides an overview of the study by identifying the topic of enquiry, research questions, and study aims. Background information is provided regarding relicensing inspections in both the private and public sector hospitals in eThekweni district and the important role such inspections play in quality and patient safety is discussed.

### **Chapter 2: Literature review**

Presents a review of relevant literature pertaining to the licensing of healthcare institutions internationally and nationally and the expectations of the relevant regulators regarding quality and patient safety standards. Analysis of existing knowledge and evidence served to inform the study's focus and design of the study. Literature reviewed highlighted such issues as the complexity of quality healthcare and of clinical expectations in relation to patient outcomes in healthcare environments that can be assessed using evidence-based best practices.

### **Chapter 3: Conceptual framework**

Explores the soundness of the quality and patient safety conceptual framework that drove this research project. The themes identified were central to the understanding of the approach to the study and are the pillars forming its conceptual framework.

### **Chapter 4: Research design and method**

Provides a detailed description of the study methodology and the rationale for the research design and methodological selection, implementation strategies and ethical considerations. The study population, sample, data collection, and data analysis methods are described in order that the reader may appreciate the intricacies of the study design and the viability of the research findings.

**Chapter 5: Presentation of findings**

Presents the results of qualitative and quantitative data analysis. Key findings include themes and sub-themes and objective findings of the participants.

**Chapter 6: Mixing and merging the results of the findings**

Discusses the mixing and merging of the results of the qualitative and quantitative strands of study.

**Chapter 7: Discussion of the results**

Discusses the findings in relation to the clinical setting, data interpretation and within the context of the literature reviewed.

**Chapter 8: Development of an audit tool**

Describes the development of a proposed audit tool based on the findings of the study and the literature surveyed.

**Chapter 9: Limitations, conclusion and recommendations of the study**

Identifies the limitations and strengths of the study. Recommendations are made in relation to the key findings of the study.

**1.13 SUMMARY OF THE CHAPTER**

This chapter provided an overview of the study by identifying the topic of enquiry, research question, and study aims. Discussion regarding relicensing inspections and the role they play in improving quality and patient safety standards, and their place within the national healthcare context has been presented in order to give the reader background knowledge of the study. The next chapter reviews, outlines and discusses the relevant literature concerning relicensing inspections and clinical audits in healthcare.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

A literature review is a process that involves researching, reading, understanding and forming conclusions about published works and literature on a particular topic. A literature review determines what is known and unknown about a subject, concept or problem (Burns and Grove 2011: 399). The literature reviewed for the topic “An audit tool to assess quality and patient safety standards for regulatory relicensing inspections in private hospitals in eThekweni district” yielded the finding that no research has been undertaken on the topic since the implementation of the NCS in private hospitals in eThekweni district. The literature search for this study included relevant national policy documents, nursing management information, documents, textbooks, journal articles and internet websites.

The literature on clinical relicensing inspections for healthcare facilities in South Africa is relatively scant, with few studies of outcomes, quality, or enforcement modalities to inform policy decisions. Those studies that have focused on the NCS do not take into consideration the private sector outcomes of quality measures. In general, private hospitals quality and patient safety initiatives are not documented nationally nor are they readily accessible for use as guidance for improving outcomes or policy discussions. In addition to there being a lack of uniform data collection in the private sector, there are varied requirements for the private and public sector hospitals. Province to Province comparisons are feasible for public sector hospitals because they follow a set of specific performance measures and data measurements of the NCS and Batho Pele principles during licensing inspections. There has not been a standardised system or legislative requirement for private hospitals to submit information on clinical outcomes compared to most hospitals internationally (Matsebula and Willie 2007: 171). Implementation of quality, patient safety and infection control at private hospitals has thus been left to

the discretion of each hospital. The Institute of Medicine argues that patient safety is not solely about addressing general systems issues to prevent the failure of a planned action ,It also entails avoiding misdiagnosis; preventing patients from exposure to unnecessary risks; and ensuring informed consent ,which is more clinically related (Betancourt 2006: 21). According to Kabane (2013: 28), the international focus is on the wider concept of patient safety which refers mainly to the effects of medical errors and unsafe care that lead to patient harm that is unrelated to the patient's medical condition. The focus internationally is on developing a culture of safety within the organisation , as a low cost solution in a cost effective way .A safety culture entails an organizational wide commitment to patient safety. (Thomas, Sexton, Nielands, Frankel and Helmreich, 2005:8). .What follows is a review of literature focusing on the tools, methods and inspection regimes in relation to regulatory compliance.

## **2.2 QUALITY ASSURANCE – AN INTERNATIONAL PERSPECTIVE**

Donabedian, a pioneer in conceptualising quality of care, distinguished between structure, process and outcome, drawing on concepts from industry. He argued that good structure increases the likelihood of good processes, and good processes increase the likelihood of good outcomes (Donabedian 1988: 1743-1748). Traditionally, the focus of measures for enhancing quality has been on structures such as systems designed to recognise professional qualifications and experience, and approve drugs, medical devices and quality of facilities. The focus has now shifted towards developing ways of measuring processes and outcomes (Shukor, Klazinga and Arah 2007: 7-25). The interest in the use of standardised audits and feedback for health professionals in the private hospitals is growing. According to the WHO, “audit and feedback can be defined as any summary of clinical performance of health care over a specified period of time aimed at providing information to health professionals to allow them to assess and adjust their performance” (WHO 2010: 5). Audit and feedback are intended to enhance professional performance and thereby improve the quality of health care and patient



safety. According to Braithwaite, Healy and Dwan (2005: 6), given the dramatic growth of regulation over the last decade, it is time to draw together research and experience from health and other sectors and to begin to formulate an evidence base for choosing between regulatory strategies. They further explain that regulatory strategies are not just about enforcing law, but cover a range of options that can be categorised in an ascending order of intervention under five types of policy instruments. Braithwaite, Healy and Dwan (2005: 7) sought to stimulate debate on how to improve the governance of health care safety and quality in Australia. They describe the five main policy instruments in this field as follows:

- Voluntarism is based on an individual or organisation undertaking to do the right thing without any coercion.
- Self-regulation is where an organised group regulates the behaviour of its members.
- Economic instruments involve supply-side funding sanctions or incentives for health care providers, and demand-side measures that give more power to consumers.
- Meta-regulation involves an external regulatory body ensuring that health care providers implement safety and quality programmes and practices.
- Command and control involves enforcement by government, for example ensuring compliance with rules for licensing facilities.

Braithwaite, Healy and Dwan (2005: 7) favour responsive regulation, which maintains that regulators are more likely to succeed by using mechanisms that are responsive to the context, conduct and culture of those being regulated. The argument of the current study also supports the concept of responsive regulation as this applies to the private hospitals in eThekweni district. The regulator in eThekweni district will be more likely to succeed by using mechanisms that are responsive to the context, conduct, and culture of its private hospitals.

Quality assurance projects date back to 1999 (as described by Rooney and van Ostenberg [1999: 1]) when a team funded by the United States Agency for International development provided comprehensive, leading edge technical expertise in the design, management and implementation of quality assurance programmes in developing countries. The reports provided technical assistance in quality design, management, process improvement and monitoring to strengthen health systems management and maternal and child health services delivery in over 30 countries.

In more recent years, the study of medical errors and adverse events has highlighted an epidemic of problems relating to patient safety in the health care system. Patient safety became a major topic of interest for research after publication in the United States of America (USA) of the landmark Institute of Medicine (IOM) report 'To Err is Human: Building a Safer Health System' by Kohn, Corrigan and Donaldson (1999: 1). This was the first report to discuss patient safety in a comprehensive way. The report declared that as many as 98,000 people die each year from preventable medical harm including healthcare acquired infections. Ten years later Jewell and McGiffert (2009: 3) pointed out that there were still about 99 000 people dying each year from hospital-acquired infections. Patient safety therefore, remains one of the biggest challenges for healthcare organisations throughout the world.

In the USA, the JCI introduced six International Patient Safety Goals (IPSG) to help accredited organisations address specific areas of concern in some of the most problematic areas of patient safety (Joint Commission International [JCI] 2010: 29). For example, with Standard IPSG.1 the organisation develops an approach to improve accuracy of patient identifications. This goal is important because wrong-patient errors occur in virtually all aspects of diagnosis and treatment. Patients may be children, sedated, disorientated, or not fully alert, may change beds, rooms, or locations within the organisation, may have sensory disabilities, or may be subject to other situations that may lead to errors in identification. The intent of this goal is therefore twofold: first, to reliably identify the patient as the person for whom the service or treatment

is intended and, second, to match the service or treatment to that individual patient. Policies and/or procedures are collaboratively developed to improve identification processes (JCI 2010: 29). This standard is audited during the certification process.

The WHO in its landmark report in 2000 noted that the ultimate goal of any healthcare system is improved healthcare outcomes, satisfaction of community needs and financial risk protection (WHO 2000: 1-18). According to the WHO Report in the Health Electronic Network (HEN), implementation of audit and feedback requires clear goals and a thorough analysis of the health care environment in question, especially if this approach is combined with incentives or penalties, or is made mandatory (WHO 2010: 8). The report further defines the aim of clinical audit as a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change (WHO 2010: 1). Aspects of the structure, processes and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team, or service level and further monitoring is used to confirm improvement in healthcare delivery (WHO 2010: 1).

Currently, healthcare organisations all over the world are seeking objective quality evaluation data to evaluate their quality standards. The UK has established the Healthcare Commission whereas the USA and Canada has set up the National Quality Forum and the Canadian Patient Safety Institute respectively. Australia has set up the Australian Council for Safety and Quality in Health Care (Braithwaite, Healy and Dwan 2005: 6). A major shift in regulatory thinking is under way to find the best ways to ensure better and safer health care. Much effort has been directed at quality improvement, but safety issues now dominate this larger reform agenda. Central to the theme of regulation is the control of risks to society and ways to ensure continuous quality improvement and patient safety. In the UK, the Chief Medical Officer at the National Health Services (NHS) and a range of safety experts developed

the “Organisation with a Memory Report”. This report defined and popularised the field of patient safety (Department of Health, United Kingdom 2000: 26). The report continues to remain relevant and pertinent today. The report explains how adverse events are caused in healthcare organisations, why these events can never be entirely eliminated, and how organisations and healthcare systems as a whole can understand and learn from safety incidents and act to reduce risks and improve safety. The report further promotes a blame free culture with accountability and encourages reporting of adverse events (Department of Health, United Kingdom 2000: 26).

The role of the private sector in monitoring health care is that both the public and private sectors have a stake in developing sound methods of measuring healthcare quality and patient safety (Blewett *et al.* 2003: 425-433). However, the role of the private sector in healthcare quality monitoring remains largely undeveloped in spite of various attempts by the AHRQ to set up such a system (Blewett *et al.* 2003: 425-433). The implementation of guidelines for quality and patient safety has been promoted by the USA Institute of Medicine and the British National Health Service to make healthcare more consistent and efficient (Hutchinson *et al.* 2003: 690-696).

### **2.3 QUALITY ASSURANCE – A SOUTH AFRICAN PERSPECTIVE**

The National Health Act of South Africa, 61 of 2003, Section 47 emphasises the need to foster good quality health services by developing structures to monitor the compliance of health establishments and agencies in relation to health care standards (Department of Health 2003: 50). The Act also provides for the creation of an OHSC as well as an Inspectorate of Health Establishments within each province. The Act further envisages a broad role for the OHSC in advising on health standards, revising or setting standards, monitoring compliance, reporting non-compliance, and advising on strategies to improve quality. The main purpose of the NCS is to develop a common definition of quality care which should be found in all health establishments in South Africa.

In South Africa, the NCS was launched in April 2008 as a response to concerns regarding the multiplicity of different standards and guidelines for managers throughout the health system and the consequent difficulty in measuring performance against a common benchmark (Department of Health 2011: 9a). The National Health Council had resolved that the NCS be followed in every province, health district and public health facility. Private health facilities are also encouraged to adopt the NCS, as all health facilities will soon have to meet regulated standards in preparation for National Health Insurance. Facilities will only be accredited and contracted if they meet nationally approved standards both in the public and private sector for National Health Insurance (Republic of South Africa, 2017b: 31). The approach taken for the development of the standards was based on principles that reflect the overall policy direction of the Department of Health, namely, universality, relevance, validity, reliability, and logic. Universality means ensuring that the standards and assessment measures are generally applicable across all health care levels and settings from public to private hospitals. It was also argued that certain standards or criteria may not be applicable in all contexts. Relevance means ensuring that standards and assessment measures represent elements of care that are critical to the provision of safe, quality health care services in South Africa. Validity and reliability relates to measurements that are objective and practical during an audit of health establishments. Logic is the arrangement of criteria and measures concerned with inputs or systems, process or policies and procedures and outputs relating to outcomes.

The OHSC Strategic Plan embodies values and principles that are informed by the South African Constitution and Batho Pele principles in that human dignity, freedom and equality means that people must come first (Department of Health 2015: 1-62). The Strategic Plan and the Medium Term Strategic Frameworks (MTSF) for 2015-2020 is a new phase in cooperating and strengthening relationships with the health sector and other partners to facilitate and support the implementation of norms and standards at all levels of care. This will lead to strengthening of health systems for the achievement

of the Millennium Development Goals, National Development Plan Goals, NHI and the National Service Delivery Agreement outcome and outputs (Department of Health 2015: 1-62). The OHSC also sets out five regulatory principles as a guide for their regulatory work:

- *Regulation must foster greater accountability.*

Regulation must set explicit benchmarks for regulated entities against which they can be measured objectively and those in charge can be held accountable for compliance. Regulators are also accountable for their regulatory decisions and the achievement of regulatory outcomes.

- *Regulation must be clear and transparent.*

Regulation should be clear, specific and explicit about the obligations placed on regulated entities and the reasons for these obligations. Regulatory decisions (or summaries thereof) should be published and subject to public scrutiny. Adequate relational distance between the health establishment subject to regulation and the regulator must ensure the necessary autonomy for it to make decisions in line with its mandate.

- *Regulation should be targeted.*

Regulation should target the problem or risk it has been established to address and regulatory outcomes should identify clearly the 'end-result' of the regulatory intervention while minimising any unintended consequences that may undermine the effectiveness of regulation.

- *Regulatory interventions should be proportionate.*

Regulatory interventions should be proportional to the regulatory problem or risk that they seek to address, and the minimum necessary to achieve objectives, being only one of a range of ways of achieving policy objectives. Regulation should avoid overly punitive approaches and resultant compliance-driven responses by regulated entities. Regulation should further avoid undue crisis-based response which may undermine the regulatory programme.

- *Regulation should be applied consistently and yield reliable decisions.*

Regulatory and enforcement processes and procedures should be consistent to ensure that decisions are reliable and rigorous, where internal rules govern regulatory processes and that staff are trained and capable of administering regulation in a consistent manner (Department of Health 2015: 10-11).

According to Matsebula and Willie (2007: 171), there has not been a standardised system or legislative requirement for private hospitals to submit information on clinical outcomes. Implementation of quality and patient safety initiatives have thus been left to the discretion of each hospital. Some private hospitals elect to participate in the Council for Health Services Accreditation of Southern Africa (COHSASA) programme. Participation in the COHSASA programme is voluntary although some provincial departments of health consult with the organisation for information that can assist with improving patient safety. Some major private hospital groups in eThekweni district have also undergone the International Standards Organization (ISO) quality accreditation (Matsebula and Willie 2007: 171).

According to Whittaker *et al.* (2011: 60), licensing is a statutory mechanism by which a governmental authority grants permission to an individual practitioner to engage in an occupation or to a healthcare organisation to operate and deliver services. Licensing allows governments to ensure basic public health and safety by controlling the entry of healthcare providers and facilities into the healthcare market and by establishing standards of conduct for maintaining that status. Licensing standards are intended to define the quality level that is necessary in order for patient care or health services such as drug dispensing by a pharmacy, to be safely delivered. These standards also define the capabilities that are needed in order for a health care organisation to advertise to the public that it is a hospital or health centre. Certification and accreditation are voluntary processes undertaken by a provider or a facility to demonstrate special competence or capability beyond the minimum requirements for licensure (Whittaker *et al.* 2011: 60). Accreditation and certification standards are periodically revised in order to stay current with

changes in health care practices and technology whereas licensure requirements usually change little from year to year and require legislative or regulatory initiatives, a much more difficult political process in many cases.

### **2.3.1 Legislative and other mandates**

A number of laws and regulations influence the quality of healthcare in South Africa, including the following:

#### **Constitution of the Republic of South Africa, Act No.108 of 1996**

Specifically, section 27 of the Constitution guarantees everyone the right of access to healthcare services, including reproductive health services and emergency medical treatment. National government is responsible for developing and monitoring policies, legislation, and norms and standards for the health sector. Provincial government can discharge their constitutional obligations by passing provincial legislation in the area of health services, but are also responsible for the implementation of national policy and legislation, while local government is responsible for municipal and environmental health functions. Section 44 of the Constitution gives the National Assembly the authority to pass legislation with regard to functional areas of concurrent competence and to prescribe minimum norms and standards. Section 41 of the Constitution outlines the principle of cooperative government and intergovernmental relations. It stipulates that all spheres of government and organs of state within each sphere must provide effective, transparent, accountable and coherent government for the country as a whole (Republic of South Africa 1996a: 25).

#### **The National Health Act No 61 of 2003**

The Act re-affirms the constitutional rights of users to access health services. Section 18 allows any user of health services to lay a complaint about the manner in which he or she was treated at a health establishment. The Act further obliges Members of Executive Council (MEC) to establish procedures



for dealing with complaints within their areas of jurisdiction. Complaints provide useful feedback on the areas within health establishments that do not comply with prescribed standards or pose a threat to the lives of users and staff alike. In terms of this Act, the Office of Standards Compliance was established to advise on health standards, carry out inspections and monitor compliance, report on non-compliance, issue or withdraw a certificate of compliance, and advise on strategies to improve quality (Department of Health 2003: 67).

### **The National Health Amendment Act 12 of 2013**

Chapter 10 of the National Health Act relating to the Office of Standards Compliance was repealed in its entirety (and other minor changes were enacted) through the promulgation of the National Health Amendment Act No 12 of 2013, which replaced the previous provisions (that had never been brought into effect) with a new independent entity, the OHSC (Department of Health 2013: 10). The main object of the OHSC is to protect and promote the health and safety of users of health services by monitoring and enforcement of compliance by healthcare establishments with norms and standards prescribed by the minister in relation to the national health system.

### **The Protection of Personal Information (POPI) Act 4 of 2013**

The purpose of the POPI Act is to ensure that all South African institutions conduct themselves in a responsible manner when collecting, processing, storing and sharing another entity's personal information by holding them accountable should they abuse or compromise personal information in any way (Republic of South Africa 2013a: 2).

### **Batho Pele principles No. 1459 of 1997**

The Batho Pele (which means 'People First') principles, were developed to improve the quality of public service (Republic of South Africa 1997: 9). These principles are ongoing and a dynamic process. The Batho Pele White Paper

stated that the South African public service will be judged by one criterion; its effectiveness in delivering services that meet the basic needs of all South African citizens (Republic of South Africa 1997: 9). Therefore, these principles should drive service delivery in any government department as well in private sector hospitals. Historically, Batho Pele was founded on 8 principles. (Republic of South Africa 1997: 9-22). The eight principles are:

- Regular consultation with customers;
- Setting of service standards; ensuring high levels of courtesy;
- Providing accurate, up-to-date information about services;
- Increasing openness and transparency about services;
- Remedying failures and mistakes;
- Increasing access to services; and
- Giving the best possible value for money.

### **2.3.2 Other acts relevant to the delivery of quality health services and which influence the functions of the OHSC**

#### **Medical Schemes Act No. 131 of 1998**

This Act provides for the regulation of the medical schemes industry to ensure consonance with national health objectives (Republic of South Africa 1998: 1-46).

#### **Medicines and Related Substances Act No. 101 of 1965**

This Act provides for the registration of medicines and other medicinal products to ensure their safety, quality and efficacy. The Act also provides for transparency in the pricing of medicines (Republic of South Africa 1965: 1-27).

#### **National Health Laboratory Service Act No. 37 of 2000**

This Act provides for a statutory body that provides laboratory services to the public health sector (Republic of South Africa 2000: 1-26).

**Health Professions Act No. 56 of 1974**

This Act provides for the regulation of health professions, in particular medical practitioners, dentists, psychologists and other related health professions, including community service by these professionals (Republic of South Africa 1974a: 1-63).

**Pharmacy Act No. 53 of 1974**

This Act provides for the regulation of the pharmacy profession, including community service by pharmacists (Republic of South Africa 1974b: 1-32).

**Nursing Act No. 33 of 2005**

This Act provides for the regulation of the nursing profession (Republic of South Africa 2005: 1-45).

**Allied Health Professions Act No. 63 of 1982**

This Act provides for the regulation of health practitioners such as chiropractors, homeopaths and others, and for the establishment of a council to regulate these professions (Republic of South Africa 1982: 1-37).

**Dental Technicians Act No. 19 of 1979**

This Act provides for the regulation of dental technicians and for the establishment of a council to regulate the profession (Republic of South Africa 1979: 1-40).

**Hazardous Substances Act No. 15 of 1973**

This Act provides for the control of hazardous substances, in particular those emitting radiation (Republic of South Africa 1973a: 1-15).

### **Foodstuffs, Cosmetics and Disinfectants Act No. 54 of 1972**

This Act provides for the regulation of foodstuffs, cosmetics and disinfectants, in particular, setting quality and safety standards for the sale, manufacturing and importation thereof (Republic of South Africa 1972: 1-14).

### **Occupational Diseases in Mines and Works Act No. 78 of 1973**

This Act provides for medical examinations of persons suspected of having contracted occupational diseases, especially in mines, and for compensation in respect of those diseases (Republic of South Africa 1973b: 1-20).

### **Human Tissue Act No. 65 of 1983**

This Act provides for the administration of matters pertaining to human tissue (Republic of South Africa 1983a: 1-15).

### **Occupational Health and Safety Act No. 85 of 1993**

This Act provides for the requirements that employers must comply with in order to create a safe working environment for employees in the workplace (Republic of South Africa 1993: 1-27).

### **Child Care Act No. 74 of 1983**

This Act provides for the protection of the rights and well-being of children (Republic of South Africa 1983b: 1-52).

### **Policy on Quality in Healthcare for South Africa**

This policy identifies mechanisms for improving the quality of healthcare in both public and private sectors. It highlights the need to focus on capacity-building efforts and quality initiatives related to health professionals, communities, patients and the broader healthcare delivery system (Republic of South Africa 2007: 1-24).

## **National Development Plan (NDP)**

The NDP aims to eliminate poverty and reduce inequality by 2030 (Republic of South Africa 2011: 297-299). Nineteen years into democracy, South Africa has made a number of gains on the economic front, in particular on its macroeconomic policy. However, health challenges are more than medical. Behaviour and lifestyle also contribute to ill-health. To become a healthy nation, South Africans need to make informed decisions about what they eat, whether or not they consume alcohol, and their sexual behaviour, among other factors. The NDP Vision 2030 states that a health system that works for everyone and produces positive health outcomes and is not out of reach. The NDP strategy is to raise the life expectancy of South Africans to at least 70 years; ensure that the generation of under-20s is largely free of HIV; significantly reduce the burden of disease; and achieve an infant mortality rate of less than 20 deaths including under-5 mortality rate of less than 30 per thousand live births (Republic of South Africa 2011: 297-299).

### **2.3.3 The National Core Standards (NCS)**

This set of standards was based on the existing policy environment and tailored to South Africa's healthcare context, while also reflecting international best practice and a strong evidence base. The purpose of the NCS has been to develop a common definition of quality care which should be found in all health establishments in South Africa (Department of Health 2011a: 16). The NCS sets a benchmark against which health establishments can be assessed, gaps identified and strengths appraised, and provides for the national certification of compliance of health establishments with mandatory standards. A subset of these standards, the six fast tracked standards, focuses on six critical areas of most concern to patients and has been prioritised throughout the public health system. These areas are:

- Values and attitudes (NCS domain of Patient Rights);
- Waiting times (NCS domain of Patient Rights);
- Cleanliness; (NCS domain of Patient Rights);

- Patient and staff safety and security (NCS domain of Patient Safety, Clinical Governance and Care);
- Infection prevention and control (NCS Domain of Patient Safety, Clinical Governance and Care); and
- Availability of medicines and supplies (NCS domain of Clinical Support Services) (Department of Health 2011a: 10-16).

Despite the efforts of government to ensure quality and safe patient care through excellent policies and guidelines it has been argued that neither are implemented at the level of management nor even at the level of patient care (Bateman 2011: 294-296). The report further noted that poor quality, poor reliability in following best practices and a lack of accountability for poor results still persists. The NCS and the six fast tracked standards have been piloted in public sector health care facilities and these concerns were confirmed by the results of a national audit conducted in 2011 and 2012. The results showed very low levels of compliance with standards in the six identified priority areas or basic critical requirements (Department of Health 2012: 33-34).

#### **2.3.4 National Health Insurance (NHI)**

In order to address historical inequities and to ensure universal coverage for all South Africans, government adopted on NHI as the means to transform the health system and grant all citizens access to good quality health services irrespective of their socio-economic status. The NHI initiative is based on the principles of universal coverage, right of access to basic health care, and social solidarity. These principles are intertwined with the concept of equity (Republic of South Africa 2017b: 1-80).

## **2.4 PRIVATE HOSPITALS IN SOUTH AFRICA**

According to Matsebula and Willie (2007: 160), private hospitals play a significant role in the South African health care system. Access to private hospital services, however, is still very limited largely because they cost significantly more than services in the public sector. Beneficiaries of medical schemes are the primary customers of the private hospital industry, although an increasing trend of self-funding patients has been reported. The changing preferences of the medical scheme population have influenced a significant shift from utilisation of public hospitals to private hospitals since 1990 (Matsebula and Willie 2007: 160).

Econex conducted a study on behalf of the Hospital Association of South Africa (HASA) in which they reported that in 2016/17 there were 525 private healthcare facilities, with 40,702 licenced beds (Econex 2017: 8-10). These facilities, however, are concentrated in the major metropolitan areas with most hospitals found in Gauteng, KwaZulu-Natal (KZN) and the Western Cape. Private hospital facilities are predominantly owned by three major hospital groups namely Netcare, Medi-Clinic and Life Healthcare with some smaller groups. Collectively, the three big groups own and operate more than three-quarters of all private sector beds and more than 80 percent of all private sector theatre facilities (Matsebula and Willie 2007: 160).

Relatively accurate data on the distribution of private hospital facilities are maintained by HASA. The majority of private hospitals in South Africa can be classified as short-stay hospitals where most patients are admitted for less than 30 days (Matsebula and Willie 2007: 160). The average size of a private hospital is small with the average number of beds being below 200. Private beds constitute 21% of total hospital beds in South Africa. The ratio of surgical beds to medical beds leans in favour of surgical beds (Matsebula and Willie 2007: 160).

In terms of the ethical rules of the Health Professions Council of South Africa (HPCSA) private hospitals are barred from appointing doctors and other health professionals with the exception of nursing staff (Matsebula and Willie 2007: 165). Since private hospitals cannot appoint doctors directly they adopt an approach based on incentives to attract various health care professionals to establish their practices within the hospital premises.

Hospitals are highly dependent on nursing staff for the success of their operations and this is true for all hospitals both in the public and private sectors. Currently, an overall shortage of nursing personnel is affecting both sectors. This shortage has contributed to an observed migration from the public to the private sector of all categories of health workers. Significant internal migration of professionals from the public to private hospitals in South Africa was noted during the periods 2001 to 2005 (StatsSA) when the number of nurses in the public sector, fell by 2%, while in the private sector increased by 7% (Breier; Wilschut and Mgqolozana 2009: 2). Internal migration within the South African health care sector and emigration to other countries are two major factors contributing to the high turnover rate of professional nurses. South African nurses are lured by more affluent countries that have more to offer in terms of competitive incentives, better working conditions and resources, safety, and a lower prevalence of HIV/AIDS. (Mokoka, Oosthuizen and Ehlers 2010: 484-489). Other factors that have contributed to the shortage of nurses in particular are emigration and a reduction in the output of nurses from nursing colleges. The shortage of nurses is considered by the private hospital industry to be a serious constraint and risk factor limiting the industry's potential for growth (Matsebula and Willie 2007: 166).

It is difficult to address patient safety without acknowledging the current nursing shortage and its impact on practice. The South African Nursing Councils figures for nursing manpower at the end of 2008 revealed 437 nurses for every 100 000 people including enrolled and auxiliary nurses. If the registered nurses (those completing the 4years course) are considered then the ratio drops to 222 registered nurses for every 100 000 people. This



translates to a ratio of 451 people for every registered nurse. The absolute minimum standard set by the World Health Organisation is 228 health workers for every 100 000 people or 438 people per health worker, maximum (Joubert 2009: 3) .The nursing shortage endangers quality of care, places patients at risk, and could ultimately undermine the entire health care industry. Interventions to improve the morale of nurses include making changes to their work hours; increasing financial bonuses for employment, scholarships, and grants to support education; recruiting nurses from other countries; offering pay differentials and incentives for shift work and specialty nursing; making changes in practice modalities; and having facilities and administrators provide greater recognition of the contributions of the nursing staff (Ballard 2003:79-84).

Econex (2013: 6-7), argues that private hospitals in South Africa play a significant role in the health system. They reduce the geographical distance to the nearest health facility for many in the population and they alleviate pressure from a substantially overburdened public hospital infrastructure.

A number of quality forums exist in eThekweni district that encourage participation from both the public and private sector hospitals. These forums lend themselves to quality initiatives and information sharing and discussion about contemporary quality and patient safety issues. Both private and public representations are present at these forums. In private hospitals, self-assessment audit tools are used for continuous monitoring of their quality systems and keeping of a balanced scorecard with a dashboard of high-risk adverse events. Regulatory relicensing should compare these scorecards in terms of what is law and institute corrective measures based on objective findings. Regulatory relicensing inspections measurements can provide valuable feedback to institutions for improvement of standards, and can be the basis for ongoing reflection on appropriateness of legislation to ensure safe and quality healthcare for its citizens. The proposed audit tool must place emphasis on the inter-linkages between quality assurance (through

regulation) and quality improvement in the implementation of quality standards.

## **2.5 OVERVIEW OF MODELS OF QUALITY EVALUATION**

Three primary approaches to the standards-based evaluation of health care quality have had broad health sector acceptance for many years: licensure, accreditation, and certification (Ensor and Palmer 2009: 5). These approaches have been refined with experience to serve different purposes and to provide different perspectives on the level of quality achieved. According to Ensor and Palmer (2009: 5), licensing is often distinguished from facility certification and accreditation, although in practice the distinction is increasingly blurred. Licensing is compulsory and is administered by a government entity thereby granting legal permission to practice based on an inspection by the regulator. This is different to accreditation or certification approaches that are based on optimal and achievable standards or a demonstration of special knowledge or capability. The purpose of licensure requirements is to protect basic public health and safety. With certification the onus is placed on an organisation to prove standards have been reached by gathering evidence or commissioning an independent audit. Accreditation is the voluntary enrolment into a programme that targets quality improvement. Entry is stimulated by perceived market advantage. According to Kabane (2013: 28), accreditation is a design that is labour intensive and requires strong institutional leadership to drive and support the initiative.

## **2.6 LICENSURE OF HEALTH CARE ORGANISATIONS**

According to Ensor and Palmer (2009: 7), the nature of health facility licensing is beginning to change in a number of countries. A traditional physical input approach based on inspections by the Ministry of Health/Health Department remains the norm in Brazil and Thailand. This traditional model, while still the norm in Canada, is beginning to change with specialty agencies being contracted to carry out inspections. In New Zealand, the emphasis is on

abolishing traditional licensing altogether and introducing a certification system with an emphasis on the accumulation of evidence by providers to prove they meet requirements (Ensor and Palmer 2009: 7). The current interpretation of the regulatory relicensing inspections for private hospitals in eThekweni district is blurred and fragmented. In a similar situation in the UK, and in order to eliminate this fragmentation, the Commission for Health Improvement was created by primary legislation in 2000, later to be replaced by the Healthcare Commission in 2004 (Ensor and Palmer 2009: 5). The Commission is a statutory quasi-autonomous body largely financed by fees (set by Government) for undertaking inspections. This quasi-autonomous body monitors the standards of public and private sector agencies in the UK. This increases the likelihood that public and private bodies will be judged by similar standards. Many countries in Africa also currently have some system of licensure in place for health care organisations and practitioners, although due to funding restrictions or poor oversight, these systems may not always be as effective as intended in protecting public health and welfare (Ensor and Palmer 2009: 7).

## **2.7 A STANDARDS-BASED APPROACH TO QUALITY EVALUATION**

According to a National Health Services (NHS) report (2014: 91), the National Institute of Clinical Excellence (NICE) in the UK, defines quality standards as concise sets of prioritised statements designed to drive measurable quality improvements within a particular area of health or care. In the context of approaches to quality evaluation a standard is defined as an explicit predetermined expectation set by a competent authority that describes an organisation's acceptable performance level (JCI 2010: 2). Standards, when applied to licensure of an individual practitioner or organisation, are usually set at a level designed to protect public health and safety. The JCI (2010: 2), in its second edition, stated that its goal of accreditation and certification programmes is to stimulate demonstration of continuous sustained improvement in health care organisations by applying international consensus

standards. These consensus standards are the six International Patient Safety Goals (IPSG) with indicator measurement support namely:

- To identify patients correctly;
- To ensure effective communication;
- To ensure the safety of high alert medication;
- To ensure right patient; right procedure surgery;
- To prevent harm from slips and falls; and
- To prevent hospital-acquired infection.

These standards have measureable elements that are key to the organisation maintaining their certification status. Standards are generally classified as addressing a system's inputs (or structures), the processes the organisation carries out, or the outcomes it expects from its care or services. Standards can develop from a variety of sources such as professional societies, panels of experts, research studies and regulations. Standards might also be organisation specific, such as those reflected in a hospital's clinical policies and procedures or clinical practice guidelines for the management of emergencies. Standards might evolve from a consensus of what are best practices given the current state of knowledge and technology. There are numerous approaches described in the literature for measurement and improvement of quality hospital performance.

Groene, Skau and Frolich (2008: 162-171) describe the dimensions of hospital performance in a six dimensional framework of the Performance Assessment Tool for Quality Improvement in Hospitals called (PATH), an initiative by the WHO Regional Office for Europe, as:

- Clinical effectiveness;
- Safety;
- Staff orientation;
- Efficiency;
- Patient centredness; and
- Responsive governance.

In 2003, the WHO sponsored a workshop of the countries that belong to the International Society of Quality Assurance in Health Care, with the intention of examining the different approaches to quality performance and deciding on the applicability of each approach to developing countries in particular (WHO 2003: 21). Some of the approaches identified at this workshop included:

- Performance indicators;
- Accreditation;
- Licensing of facilities and service providers;
- Problem solving;
- Performance standards;
- Continuous quality improvement; and
- Decentralisation of management.

This workshop was not able to reach consensus on the best approach to quality performance and instead recognised that each approach has a contribution to make in the understanding of quality performance in health and that continuous research and contact sessions between different countries was necessary to improve the overall measurement of quality performance. It was also recognised that no single suitable approach existed, and that each approach has its advantages and shortfalls (WHO 2003: 21).

## **2.8 INDICATOR MONITORING SYSTEM OF QUALITY EVALUATION**

Evidence suggests that audit and feedback based on indicator data can be effective in changing health care professional practice (De Vos *et al.* 2009: 119-129). Monitoring the indicator data may also help to target specific quality improvement initiatives such as educational programmes and development of protocols. An indicator may be defined as a measure used over time to determine the performance of functions or processes. It can be used to assess the adherence to a standard or the achievement of quality goals (De Vos *et al.* 2009: 119-129). Chiu *et al.* (2007: 21-28) argue that health care indicators can be used as a mechanism of benchmarking and designing a quality indicator system in line with Donabedian's structure, process, and

outcome definitions. However, their study indicated that recent trends in the development of performance measures are tilted towards outcome and process measurements rather than structural measurements.

De Vos *et al.* (2009: 119-129) describe an indicator system as useful in monitoring structures, processes and outcomes at an individual, organisational, community, regional or national level. However, too many indicators in the data set will be overwhelming to practitioners and the quality of data collection will therefore likely be compromised. Instead of developing an indicator to measure every organisational function or standard, it might be helpful to initially select five top indicators that have a consensus as to their importance and validity (De Vos *et al.* 2009: 119-129). It is more helpful in the long run to have complete and accurate data on a few key aspects of the vital signs of the organisation, rather than to have dozens of indicators for which the burden of data collection and analysis simply outweighs the benefits. An indicator is a quantifiable value that can be used to evaluate performance over time, such as through quarterly analysis of aggregate data, rather than just a snapshot evaluation during an inspection. Rather than a general statement such as “are patients satisfied?” an indicator gives a specific and quantifiable measurement to this expectation, such as “75% of patients surveyed in the inspection expressed satisfaction with the services they received” (De Vos *et al.* 2009: 119-129). Indicator monitoring often provides a valuable adjunct to standards-based evaluation, since indicators often focus on a few key structures, processes, or outcomes that represent an overall picture of quality of the organisation. Indicators are often expressed as a rate or a ratio, which adds to their usefulness both in measuring trends over time, as well as providing comparative data among similar types of organisations (De Vos *et al.* 2009: 119-129).

## **2.9 PATIENT SAFETY A GLOBAL PROBLEM**

It must not be forgotten that error in health care is largely inevitable owing to a dependence on complex technology and human interaction. Therefore, the best that can be done is to minimise the risk of an adverse event occurring through the proper application of clinical risk management and patient safety strategies (Tingle 2011: 642-643). According to the WHO, every patient has the right to be treated properly and without harm and every patient has the right to be treated using the safest technology available in health facilities (WHO 2008a: 1-11). This implies freedom from unnecessary or potential harm associated with health care. All health professionals and institutions have obligations to provide safe and quality health care and to avoid unintentional harm to patients. The scale of the patient safety challenges in Africa cannot be underestimated.

The All Party Parliamentary Group (APPG) on global health, in its Triple Impact of Nursing report in 2016, argued that strengthening nursing will have a triple impact on improving health, promoting gender equality and supporting economic growth in meeting the needs of its citizens in ensuring accessibility to universal health coverage. Nurses around the world have concerns about staffing problems, poor facilities, inadequate education, training and support. The inability of nurses to practice to their full extent of their competencies, with fewer opportunities to develop into leadership roles that influence policy decisions, may result in poor quality of patient care (WHO 2016b: 4).

The WHO, via the World Alliance on Patient Safety Research, calls for more research to be conducted in certain areas of concern, namely, health care-associated infections, adverse drug events, and surgery and anaesthesia (WHO 2008a: 1-11). Infection caused during health care is estimated to affect some 1.4 million people at any given time. In developed countries, the toll is 5% to 10% of patients admitted to hospitals, while in some developing countries as many as a quarter of all patients may be affected by a health care-associated infection. With the sharp rise in antimicrobial resistance

worldwide, it is crucial that research be focused on reducing resistance to drugs and the spread of multidrug resistant pathogens (WHO 2008a: 1-11).

Research shows that between 7% and 10% of patients in acute care settings experience an adverse drug event of which some 28% to 56% are preventable. Hospital admissions due to adverse drug reactions may be more than 10% of total admissions in some countries (WHO 2008a: 1-11). The WHO further calls for more research in this area, focusing on developing countries, where it is suspected that rates of adverse drug events are even higher than in developed countries.

Surgery and anaesthesia services are among the most complex and costly procedures for health systems to deliver. Evidence in developed countries indicated that adverse events in the operating room account for at least 50% of all adverse events in surgical patients. In developing countries, surgical care is constrained by poor facilities, lack of trained staff, inadequate technologies and limited supplies of drugs and materials. Research is needed to explore the reasons for geographical differences in the incidence of surgical and anaesthesia errors.

## **2.10 GLOBAL PATIENT SAFETY EFFORTS**

### **2.10.1 Medication safety**

Patient safety is an international cultural phenomenon. Seventeen years has passed since the release of the Institute of Medicine's (IOM) *To Err Is Human: Building a Safer Health System* report that opened the door to the problems of patient safety in health care settings (Kohn, Corrigan and Donaldson 1999:1). Patients were being harmed as a result of seeking health care for treatment interventions. The IOM report emphasised that no health care organisations could no longer ignore the consequences and ramifications of unsafe practices and increased attention to patient safety was needed. No patient should succumb to another illness or adverse event as a result of human error or process failure. The travesty of human errors is that they are preventable.



At the time of the IOM report, medical errors were the eighth leading cause of death in the United States, and national dollar costs related to medical errors were estimated at \$17 billion to \$29 billion. The challenge from this report was to break the cycle of inaction and silence and promote patient safety in hospitals. Patient safety culture is seldom explored in hospitals in developing countries. However, more recently a patient safety culture survey in a South African district hospital revealed that less than fifty percent of the respondents graded their units as acceptable in terms of patient safety (Mayeng and Wolvaardt 2015: 628-635). The results of the survey showed that patient safety incidents were not investigated and that there was a lack of commitment to quality issues. The medical doctors were found to have negative perceptions about safety dimensions, with personnel management on safety issues scoring less poorly than the other dimensions (Mayeng and Wolvaardt 2015: 1-7). This finding is of a particular concern when the culture of reporting incidents that could harm healthcare users of the service is overlooked.

### **2.10.2 Prevention of hospital-acquired infections**

Infection control risks can stem from a variety of areas in a healthcare organisation, and most can lead to significant patient or staff harm. Some common examples include lack of hand hygiene; unsafe injection practices; poor cleaning, disinfection, sterilisation of instruments and scopes; and inadequate environmental cleaning. Carbapenem-resistant Enterobacteriaceae is a significant clinical and public health concern, with a potential for widespread and rapid transmission within and between facilities. Carbapenem-resistant Enterobacteriaceae is a family of highly pathogenic antibiotic-resistant organisms which are endemic across Washington, D.C. healthcare facilities, with 5.2% of inpatients testing positive for the bacteria, according to new research published in infection control and hospital epidemiology reports (Rueben 2017: 1). According to the Society for Healthcare Epidemiology of America, there are some major risks for infection in any healthcare facility which should be mitigated, such as surgical and

other device-related infections, diarrheal diseases, clostridium difficile, post-procedure pneumonia, respiratory diseases as well as antibiotic resistance to significant organisms. Those of us in public organisations, private organisations, academic and research institutions need to unite as patient advocates addressing the issue head on and implementing evidence-based interventions such as stewardship in all clinical settings to improve care and preserve the efficacy of trusted antibiotics (Pyrek 2017: 1).

To this extent, the Accreditation Association for Ambulatory Health Care recently added a requirement for written risk assessments documenting how facilities are prioritising patient safety (Segal 2016: 1). The new standard underscores why healthcare organisations must have an infection risk assessment in writing that can be updated annually. A formal risk assessment provides a basis for infection surveillance, prevention and control activities, identifies at-risk populations/procedures in a facility, assists in focusing surveillance efforts towards targeted goals, and aids in meeting regulatory and other requirements.

The WHO has declared patient safety to be a serious public health issue (WHO 2009: 5). Solutions to global patient safety require commitments and collaboration from global communities. The WHO member states agreed upon at a World Health Assembly, on patient safety in 2004 (WHO 2009: 9). Currently, the WHO has two international global patient safety campaigns that champion improvement in patient safety, clean care, and safe surgery.

### **2.10.3 Antibiotic resistance a worldwide problem**

Antibiotics have been a critical public health tool since the discovery of penicillin in 1928, saving the lives of millions of people around the world. Today, however, the emergence of drug resistance in bacteria is reversing the miracles of the past 80 years, with drug choices for the treatment of many bacterial infections becoming increasingly limited, expensive, and, in some cases, non-existent. In the National Action Plan legislation in the USA, to

combat antibiotic resistance, it has been estimated that drug-resistant bacteria cause two million illnesses and approximately 23,000 deaths each year in the United States (United States Health Department 2015: 2-4). The National Action Plan provides a roadmap to guide the USA in rising to this challenge and further requests that aggressive action around the world be implemented in order to reduce the incidence of urgent and serious drug-resistant threats including carbapenem-resistant enterobacteriaceae, methicillin-resistant staphylococcus aureus, and clostridium difficile. The road map also includes aspects of education and outreach programmes to clarify and strengthen responsible, appropriate use of antibiotics in humans and in animals at the right time at the right dose for the right duration within an antibiotic stewardship environment in healthcare facilities. By 2020, the USA government hopes that significant outcomes of Goal 1 (Slow the Emergence of Resistant Bacteria and Prevent the Spread of Resistant Infections) will include:

- The establishment of antibiotic stewardship programmes in all acute care hospitals and improved antibiotic stewardship across all healthcare settings.
- Reduction of inappropriate antibiotic use by 50% in outpatient settings and by 20% in inpatient settings.
- The establishment of State Antibiotic Resistance Prevention (Protect) Programmes in all 50 states to monitor regionally important multidrug resistant organisms and provide feedback and technical assistance to healthcare facilities.

#### **2.10.4 “Clean Care is Safer Care”**

The first WHO global patient safety challenge is “Clean Care Is Safer Care” which aims at principles of infection control regarding hand hygiene (WHO 2015: 4). The WHO reports that healthcare-associated infections (HCAIs) remain the highest frequency of adverse events during care delivery. On an annual basis, hundreds of millions of patients globally are affected by HCAIs. In developed countries, the number of HCAIs is high, but the number is two to

three times higher in developing countries. The most frequent HCAI in developed countries is urinary tract infection (UTI), whereas the most frequent HCAI in developing countries is Surgical Site Infection (SSI) affecting two-thirds of the patients who undergo surgery. In comparison, this is nine times the frequency of developed countries. Reliable data gathering contributes to estimating the finances associated with this burden of care. Most countries lack the surveillance systems to track HCAs and standardised criteria to diagnose them. Nevertheless, HCAs result in massive amounts of healthcare costs and unnecessary deaths. The strategy of the campaign is to improve and sustain hand hygiene practices of healthcare workers at the right times and in the right way (WHO 2015: 4). In 2011, the first global hand hygiene survey was conducted and repeated in 2015/2016 (WHO 2015: 4). The objective was to assess the level of progress in a range of healthcare facilities in terms of hand hygiene infrastructure, promotional and training activities, performance monitoring and feedback as well as institutional safety climate. Another objective was to motivate healthcare facilities to continue to track their progress against these indicators as part of their quality and safety agendas, and to provide feedback in support of this through summary results. Hand hygiene is now recognised as a key quality indicator of healthcare (WHO 2015: 4).

#### **2.10.5 The Safe Surgery Saves Lives Campaign**

The second WHO global patient safety challenge is “Safe Surgery Saves Lives” (WHO 2008b: 8). The goal of this campaign aims at improving the safety of surgical care in all healthcare settings. The primary intervention developed with this campaign is a surgical checklist. A culture of safety is essential to prevent errors and promote a quality healthcare environment. A global culture of safety will require a multifaceted approach that focuses on surveillance, oversight, enforcement, and continuing education. The WHO surgical checklist includes three major areas of safety related to the induction of anaesthesia: sign-in, the incision time, and the time when the patient leaves the operating room called sign-out. This checklist serves to coordinate patient

care, confirms the surgery team, and fosters communication among all surgical team members. More than 300 organisations and 3,000 hospitals worldwide are participants and supporters of the safe surgery campaign. With more than 234 million operations performed globally each year, at least 500,000 deaths per year would be preventable with the use of the WHO surgical safety checklist (WHO 2008b: 8). The Anaesthesia Patient Safety Foundation (APSF) reports that the incidence of conditions requiring surgery is rising as a proportion of the total global burden of disease, and surgical intervention is expected to increase around the world (Morell 2008: 21-36). Surgical care and its safe delivery can potentially affect the lives of many millions of people worldwide. To this end the foundation supports the WHO safe surgery initiative as it defines a core set of minimum standards that can be applied universally across borders and settings. The WHO Safe Surgery Saves Lives Challenge hopes to create an environment of safety that will help improve both access for and care of surgical patients (Morell 2008: 21-36). The report also noted that there are more major surgeries than births worldwide, yet surgery is much more dangerous and has a much higher mortality rate (Morell 2008: 21-36).

#### **2.10.6 Culture of safety**

The Institute of Health Improvement (IHI) defines a culture of safety as an atmosphere of mutual trust in which all staff members can talk freely about safety problems and how to solve them without fear of blame or punishment (Institute of Health Improvement [IHI] 2016: 1). Healthcare organisations are changing to develop a culture of safety. A culture of safety requires every member of the organisation to be an active participant for the promotion of safety. A culture of safety is essential to prevent errors and promote a quality healthcare environment. The IHI Report suggested certain changes to improve safety, such as:

- Conduct patient safety leadership walk rounds.
- Create a reporting system.
- Designate a Patient Safety Officer.

- Re-enact real adverse events from your hospital.
- Involve patients in safety initiatives.
- Relay safety reports at shift changes.
- Appoint a Safety Champion for every unit.
- Simulate possible adverse events.
- Conduct safety briefings.
- Create an Adverse Event Response Team.

According to the report, a global culture of safety will require a multifaceted approach that focuses on surveillance, oversight, enforcement, and continuing education. The report further calls for leaders in the organisation to improve upon safety by being visibly committed to change and enable staff to openly share safety information. When an organisation does not have such a culture, staff members are often unwilling to report adverse events and unsafe conditions because they fear reprisal or believe reporting will not result in any change (IHI 2016: 1).

## **2.11 QUALITY MONITORING TOOLS**

The WHO noted a vast number of audit tools that can be used to improve healthcare quality (WHO 2003: 71-77). Most of the tools cannot stand alone, they need to be part of a cycle of standards, assessment, and change management if they are to be effective. Some require complex organisation, technology and record linkage, others require little more than pencil and paper. For best results they all require a positive attitude and a commitment to improvement. The specific tools used for quality improvement in healthcare depend on local and national priorities, but some global concepts are generally applicable. In general, improvement may target processes such as infection control systems, clinical indicators or strategies such as health reform. These concepts are not in themselves tools for developing, measuring or improving standards, but they provide overall frameworks for quality improvement.

## **2.12 SUMMARY OF THE CHAPTER**

In this chapter an in-depth literature review was presented regarding quality assurance audits and methods of assessing quality and patient safety in healthcare facilities. Guided by the NCS and the Batho Pele principles it is clear that gaps exist between public and private healthcare facilities regarding the clinical practice audits of quality evaluation. Similarities identified in the literature pointed to the fact that most countries have common goals with clinical practice audits relating to quality and patient safety.

## **CHAPTER 3: CONCEPTUAL FRAMEWORK**

### **3.1 INTRODUCTION**

The conceptual framework that drove this research project is the NCS and the Batho Pele principles of South Africa. The Batho Pele principles fit well with NCS and the six fast track standards which is also an initiative of national government, forming the cornerstone of quality and patient safety in South Africa. Batho Pele is an instrument that seeks to introduce a fresh approach to service delivery; an approach which puts pressure on systems, procedures, attitudes and behaviour within the public service and reorients them in favour of the customer. Batho Pele can be viewed as an approach which places the people first (Republic of South Africa 1997: 12). It may be used to create a framework for the delivery of healthcare services which treat citizens more like customers and enables them to hold healthcare personnel accountable for the services they receive. It can be also stated that Batho Pele is a framework which guides healthcare organisations to be more focused on patient needs. The four themes that are central to the understanding of the approach to this study are the pillars forming its conceptual basis. The themes that were identified by the author during the research are:

- Putting the people first, relating to patient experience.
- There is a link between quality and patient safety.
- Balancing the quality and patient systems through regular evaluation to determine outcomes.
- Licensing systems are learning systems that contribute to quality and patient safety through use of strategies.

The conceptual framework guided the development of a clinical audit tool for relicensing inspections for private hospitals in eThekweni district.



### **3.2 THE BATHO PELE PRINCIPLES – PUTTING THE PEOPLE FIRST**

To guide this research study, the conceptual framework underpinning the Batho Pele principles and the NCS of South Africa was used in a systematic way to develop an audit tool for relicensing inspections for private hospitals in eThekweni district. The Batho Pele principles were developed by the South African Government in order to improve quality of public services and to ensure that all citizens are treated fairly. All Public services departments are expected to comply with these principles. The White Paper, also known as the 'Batho Pele', which is a Sesotho expression meaning, 'people first', is a document on the transformation of public service delivery that was published in October 1997, notice 1459 of 1997. The White Paper sought to address two issues: putting people first, and viewing the recipients of services as customers. It is a policy framework that consists of eleven service delivery principles that are deemed to represent an appropriate approach to address service delivery challenges. Batho Pele was founded on 8 principles (Republic of South Africa 1997: 9-22). The latter three principles are implemented in eThekweni and a few other provincial districts within the country. The three add on principles are staff related and referred to as reward principles (Department of Health 2011b:1). A total of 11 principles are discussed below:

*Consultation:* Citizens should be explained the level of care they will receive and that they have a choice about the services offered.

*Service Standards:* All citizens should be informed of the standard of care they will receive so that they are familiar of what to expect. Service standards maybe displayed.

*Access:* All citizens should have equal access to the services to which they are entitled to. This also refers to availability of resources and respect for human dignity.

*Courtesy:* Citizens should be treated with courtesy and consideration. Courtesy is displayed in many ways like practising good manners and respect towards all citizens.

*Information:* Citizens should be given full, accurate information about the public services they are entitled to receive. All questions and queries should be addressed correctly with respect.

*Openness and transparency:* Citizens should be told how national and provincial departments are run, how much they cost, and who is in charge. This way it is easy for them to channel their queries to the correct people.

*Redress:* If the promised standard of service is not delivered, citizens should be offered an apology, a full explanation and a speedy and effective remedy. When the complaints are made, citizens should receive a sympathetic, positive response. This principle requires an active approach to handling complaints.

*Value for money:* Public services should be provided economically and efficiently in order to give citizens the best possible value for money. This means that budgets should be planned carefully and the resources should be properly controlled.

*Encouraging innovation and rewarding excellence:* Innovation can be new ways of providing better service, cutting costs, improving conditions, streamlining, and generally making changes which tie in with the spirit of Batho Pele. It is also about rewarding the staff who “go the extra mile” in making it all happen.

*Customer impact:* Impact means looking at the benefits provided for the customers both internal and external. This principle also shows how the overall service delivery and customer satisfaction has improved. It is also

about making sure that all customers are aware of and exercise their rights in terms of the Batho Pele principles.

*Leadership and strategic direction:* Good leadership is one of the most critical ingredients for successful organisations. Organisations who do well in serving their customers can demonstrate that they have leaders who lead by example, who set the vision, and ensure that the strategy for achieving the vision is owned by all and properly deployed throughout the organisation. They take an active role in the organisation's success. It is important that nursing staff are aware of patients' rights and are able to apply them with the Batho Pele principles for an improved public service as well as quality nursing care.

### **3.3 THE SIX FAST TRACKED STANDARDS OF THE NATIONAL CORE STANDARDS**

The six fast track standards of the NCS were developed to improve quality healthcare in South Africa and so relate to the Batho Pele principles that apply to the study (Department of Health 2011: 15-16a). The six critical patient centred care areas of the fast track standards are related to the first three clinical domains of the NCS and were also relevant to the objectives of the study. The clinical domains are:

*Patient rights domain:*

- Values and attitudes
- Waiting times
- Cleanliness

*Patient safety, clinical governance and care domain:*

- Patient safety
- Infection prevention and control

*Clinical support service domain:*

- Availability of medicines and supplies.

Given the long-term nature of quality improvement programmes to address deficiencies identified in certification and accreditation systems, the Department of Health has used information obtained from patient complaints and satisfaction surveys to develop a plan entitled 'Fast Track to Quality' (Department of Health 2011: 63a). The selection of the six most critical areas for patient-centred care is based on the Constitution of South Africa, the Batho Pele principles, the Patients' Rights Charter and the NCS, and is in accordance with the National Service Delivery Agreement (Department of Health 2011: 63a). The conceptual framework of the NCS with its six fast track standards and the Batho Pele principles guided the entire study and formed the basis on which the objectives of the study were assessed.

### **3.4 THE LINK BETWEEN QUALITY AND PATIENT SAFETY**

This link between quality healthcare and patient safety suggests that principles and models that are utilised in the analysis of quality in healthcare apply similarly to issues of patient safety. One such link can be identified in the basic principles of a healthcare quality model that was developed by Donabedian, in which healthcare services were likened to the productive processes of other sectors where inputs are converted to final goods or services (Donabedian 1988: 1743-1748). Donabedian identified structures or inputs, processes and outcomes as the key determinants of the quality of healthcare services, and it is believed that these determinants apply equally to patient safety. 'Structures or inputs' refer to all the required inputs in healthcare to ensure the production of quality services. These inputs include the quality and quantity of personnel, medication, consumables, funding, technology, equipment and facilities that are necessary to ensure delivery of quality healthcare services. 'Processes' refers to the policies, procedures, clinical guidelines, protocols and clinical diagnostic criteria required to produce quality healthcare services. 'Outcomes' refers to the results of clinical

care such as the case fatalities, post- surgical infections, readmissions and discharges. Clinical incidents and adverse events are by definition also outcomes or products of unsafe patient care. This framework enabled the researcher to determine whether the clinical incidents and adverse events were due to problems that occurred at input or process levels and to explain the adverse outcomes. This concept is illustrated in Figure 3.1.

Organisational Attributes Structure	Process	Outcomes
Physical Characteristics		
<b>Management</b> <ul style="list-style-type: none"> <li>• Executive Leadership</li> <li>• Board Responsibilities</li> <li>• Culture</li> <li>• Organisational Design</li> <li>• Information Management</li> <li>• Incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Diagnosis</li> <li>• Treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Morbidity</li> <li>• Mortality</li> <li>• Service Quality</li> </ul>

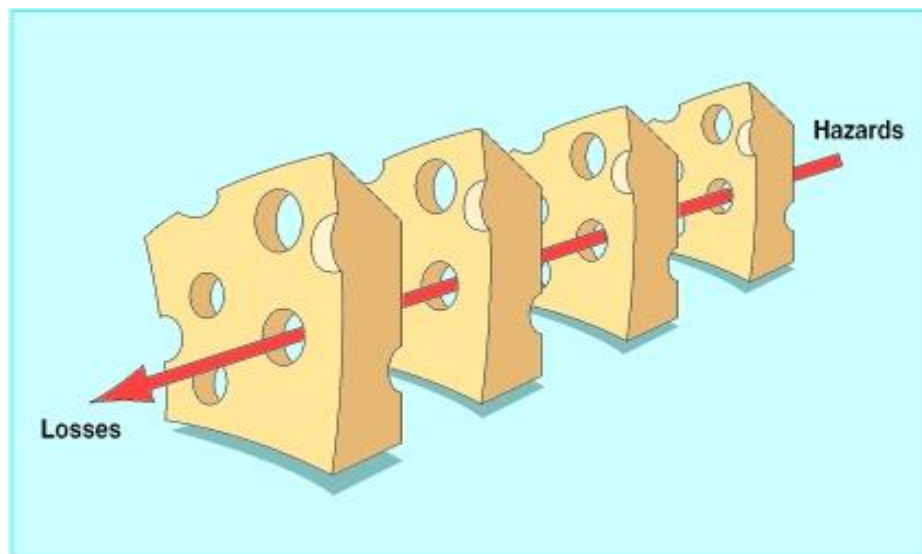
**Figure 3.1: Structure, Process and Outcomes Framework**

Source: Adapted from Glickman *et al.* (2007: 19:341-348)

### 3.5 ORGANISATIONAL MODELS OF ACCIDENTS

Reason's (2000: 768-770) model explained how an organisational safety culture contributes to patient safety. The author focused their study on the diagnosis of 'vulnerable systems syndrome'. The author related it to the 'Swiss Cheese' model of accident causation, described as "successive layers of defences, barriers and safeguards in an organisation that renders them vulnerable to adverse events" (Reason 2000: 768-770). The author hypothesised that most accidents can be traced to one or more of four levels of failure: organisational influences, unsafe supervision, preconditions for unsafe acts, and the unsafe acts themselves. In this model, an organisation's defences against failure are modelled as a series of barriers, with individual weaknesses in individual parts of the system, which are continually varying in size and position. The system as a whole, produces failures when all individual barrier weaknesses align, permitting "a trajectory of accident

opportunity", so that a hazard passes through all of the holes in all of the defences, leading to a failure. This concept is illustrated in Figure 3.2.



**Figure 3.2: The Swiss Cheese Model**

Source: Adapted from Reason (2000: 768-770)

At an organisational culture level the vision, mission, structure, policies, communication and budgets of an organisation can have a direct influence on the environment of its units or subunits. The negative sequence in the production of error therefore begins at a strategic level in the organisation and is transmitted down to the work situation and these shortfalls at a strategic level create conditions for both errors and violations of procedures to occur. It is the alteration of the barrier or defence environment that allows the accident sequence to proceed down the line and produce an incident or accident. The occurrence of an incident also means that the individuals at the coalface are recipients of this negative accident sequence, rather than its generators. Reason (2000: 768-770) further argued that certain weaknesses exist in many organisations that allow hazards to be converted into incidents and adverse events. These weaknesses are described as latent and active failures respectively. Active failures are errors and violations that occur as a result of a direct interaction between patients and the healthcare system at a unit level. Latent failures on the other hand represent errors and violations that occur as a result of the failure by the designers, regulators and managers of the system

to prevent the negative accident sequence from spreading down the organisation to the unit level where they occur.

### **3.6 BALANCING THE QUALITY AND PATIENT SYSTEMS THROUGH REGULAR EVALUATION TO DETERMINE OUTCOMES AND REDUCE ERRORS**

Healthcare can be improved by increasing patients' safety and reducing the level of error in healthcare delivery. Systems must be designed and health professionals trained to improve patient safety. This can be done by reducing hazards in healthcare, and limiting the seriousness of the consequences of errors when they do occur (Department of Health 2011: 7). Several basic and specific rights are implied here such as access to healthcare, informed consent, participation in decision-making, providing more and better information, getting the best value for money, and human dignity. Quality healthcare is defined as the delivery of care that has the ability to satisfy the needs of patients, is safe (avoiding injuries), effective (care that is scientifically based), patient-centred (providing care that is individualised), timely (reducing waiting and harmful delays), efficient (avoiding wasting of valuable resources, supplies, equipment, ideas and energy), and equitable (available to all) (Kohn, Corrigan and Donaldson 1999: 1; Searle 2008: 393). It also seems to be imperative that patient safety and a culture of change be driven by senior leaders in the organisation. Executive walking rounds are found to positively influence patient safety through direct interaction with staff (Thomas *et al.* 2005: 8). Today senior leaders in healthcare organisations are also joining clinicians at unit level in safety initiatives such as comprehensive unit based safety programmes (CUSP) where staff see how senior executives embrace problems and facilitate solutions (Pronovost and Vohr 2010: 96).

### **3.7 PATIENT IMPROVEMENT FRAMEWORK**

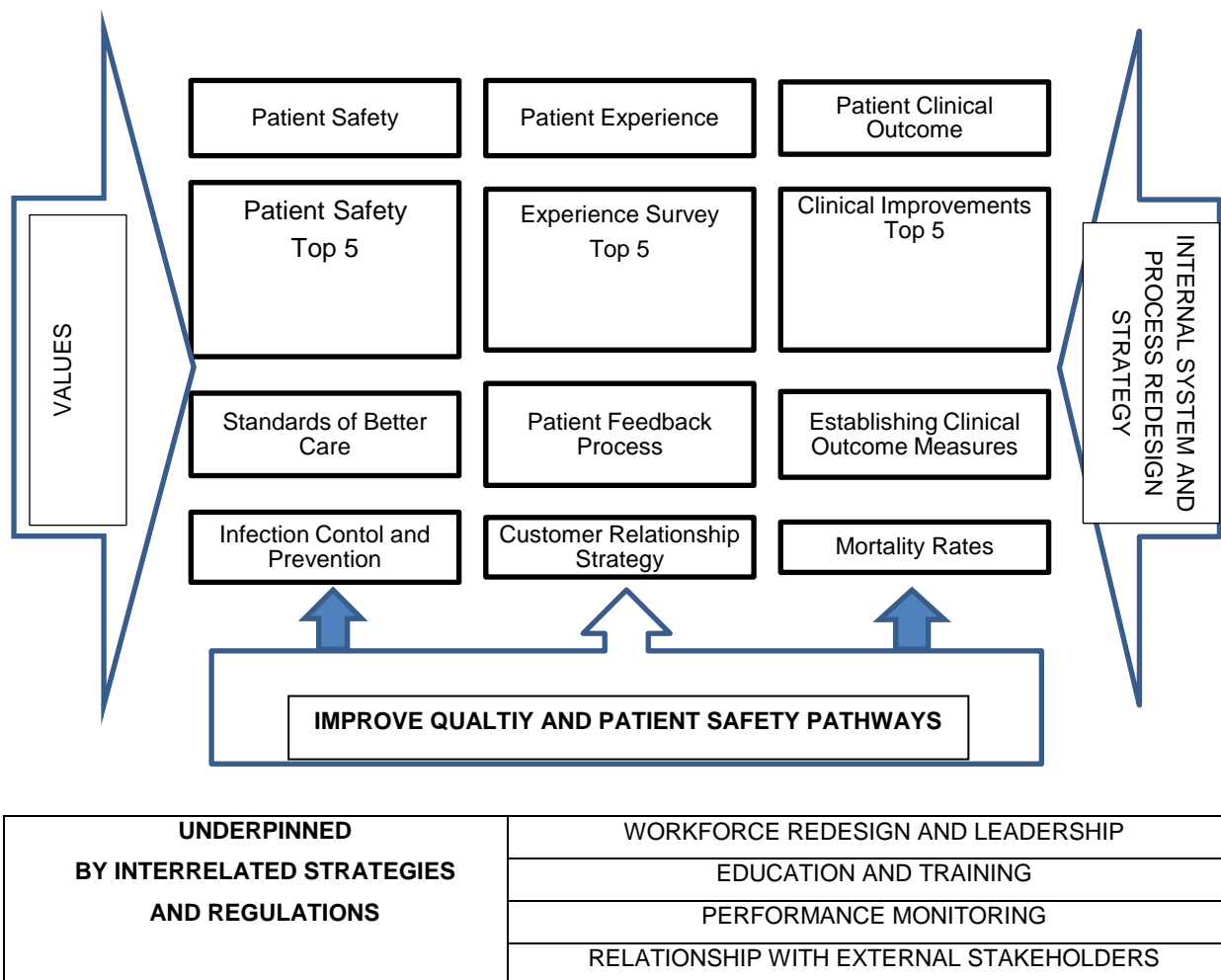
The National Health Services in the UK has moved towards a Patient Improvement Framework due to the pressures of governmental factors and patient led concerns about the quality and standard of service (Hackett 2008: 65-74) as illustrated in Figure 3.3. Research evidence shows real concern about infection rates, the need for choice, the importance of having good quality caring services available locally, and the desire for patients to be engaged in issues concerning service delivery. For example, research evidence suggests that choice is valued more by people in lower socio-economic groups than was first realised, and could act as a powerful lever on provider behaviours and approaches (Hackett 2008: 65-74). The NHS has moved towards an increasingly regulatory framework for service providers linked to the development of external review, validation and assessment and is creating significant incentives and sanctions with regard to the supply side. The development of the Healthcare Commission ratings for the use of resources and quality of services is a major reputational issue for service providers, and one which patients are using when making choices. The combination of governmental, environmental and regulatory features on the supply side, is aimed at creating more intelligent patients who can use their choices to determine their provider of choice. The NHS approach focuses on:

- Engaging clinical teams to understand the reasons for the improvement agenda and choosing the priorities.
- Focusing on training and development of staff in key positions on the science of safety management.
- Communicating constantly through various groups of individuals about the purpose, progress and results of efforts.
- Providing feedback regarding patient experience, outcome and safety strategies.
- Developing the skills and capabilities of teams around service improvement expertise linked to lean thinking or actual tangible projects.



- Using reward and recognition and non-financial rewards for staff (Hackett 2008: 65-74).

The patient improvement framework places emphasis on patient's right to choice in quality health services. Stronger regulation on the supply side with emphasis on training and development of staff, effective communication, feedback to clients, effective teams ,incentives and staff recognition.

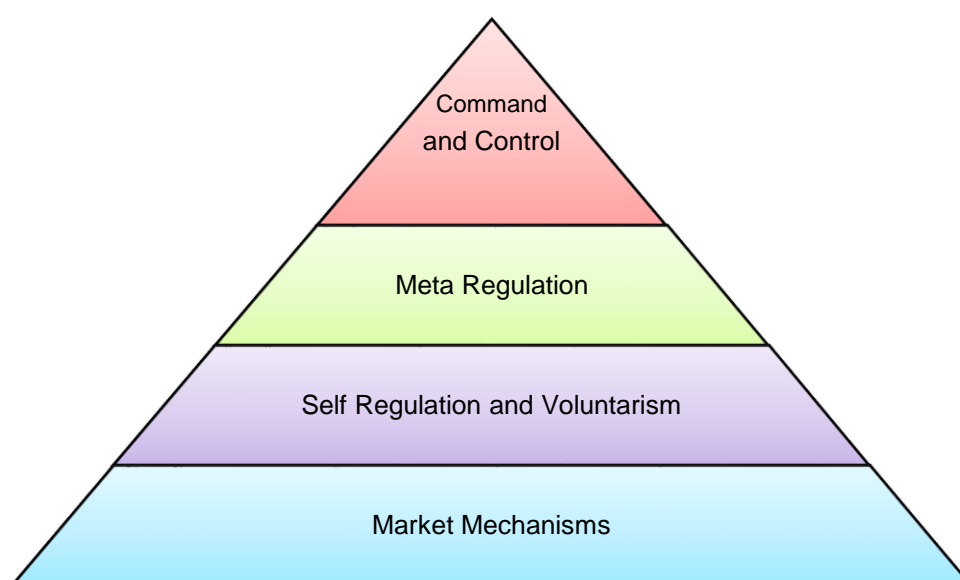


**Figure 3.3: Patient Improvement Framework**

Source: Adapted from NHS Trust (Hackett 2008: 65-74).

### 3.8 REGULATORY PYRAMID AND HEALTHCARE SAFETY AND QUALITY MECHANISMS

Braithwaite, Healy and Dwan (2005: 7) proposed a framework for analysis that is based on regulation and its different levels and applicability to patient safety, as illustrated in Figure 3.4. Their main argument derives from the concept of responsive regulation which maintains that regulators are more likely to succeed by using mechanisms that are responsive to the context, conduct and culture of those being regulated (Braithwaite, Healy and Dwan 2005: 7). Escalating sanctions can be invoked that is, soft words before hard words, and carrots before sticks (Braithwaite, Healy and Dwan 2005: 7). The authors illustrated the concept by means of a regulatory pyramid that stretches from regulation to market mechanisms, with examples relating to patient safety across the spectrum. The base of the pyramid is formed by market mechanisms (for example, payments to incentivise quality), followed by voluntarism (for example, clinical protocols), self-regulation (for example, industry standards), and meta-regulation (for example, compulsory incident reporting), with command and control at the apex of the pyramid for example, criminal penalties.



**Figure 3.4: Regulatory pyramid and healthcare safety and quality mechanisms**  
Source: Adapted from Braithwaite, Healy and Dwan (2005).

### **3.9 LICENSING SYSTEMS ARE LEARNING SYSTEMS THAT CONTRIBUTE TO QUALITY AND PATIENT SAFETY THROUGH USE OF STRATEGIES**

Developed countries such as the UK, USA, Canada and Australia consider patient safety to be an important dimension in the quality assessment of health system performance (Shukor, Klazinga and Arah 2007: 7-25). The importance of identifying patient safety as a quality issue implies that improving patient safety improves the quality of healthcare services and therefore also improves the health outcomes and ultimately the performance of the healthcare system. Central to the relationship between patient safety, quality and the healthcare system performance is also the understanding that reducing the harm that is caused by the healthcare system to the population in general improves the population's quality of life.

### **3.10 Conceptualisation of quality of care**

There have been many attempts at defining quality in healthcare, and it is worthwhile to recall a few of these that have been described by Legido-Quigley *et al.* (2008: 32) as depicted in Table 3.1.

**Table 3.1: The definitions of quality of care**

Author/Organization	Definition
Donabedian (1988)	Quality of care is the kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that attend the process of care in all its parts.
IOM (1990)	Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.
Department of Health (UK) (1997)	Quality of care is: Doing the right things (what). To the right people (to whom). At the right time (when). And doing things right the first time.
WHO (2000)	Quality of care is the level of attainment of health systems' intrinsic goals for health improvement and responsiveness to legitimate expectations of the population.
Council of Europe (2002)	Quality of care is the degree to which the treatment dispensed increases the patient's chances of achieving the desired results and diminishes the chances of undesirable results having regard to the current state of knowledge.

Source: Adapted Legido-Quigley *et al.* (2008:32)

The definitions by the various authors and organisations have a common thread that runs through them that emphasise the following:

- Patient centeredness;
- Good health outcomes; and
- Knowledgeable and skilled professionals.

Research supports arguments that there is a logical relationship between patient safety, healthcare quality and health system performance (Kabane 2013: 1-32; Kieft *et al.* 2014: 249). This relationship means that any interventions aimed at improving patient safety will also make some contribution towards improving the overall healthcare quality and performance of that health system. The importance of identifying patient safety as a quality issue implies that improving patient safety improves the quality of healthcare services and therefore also improves the health outcomes and ultimately the performance of the healthcare system. The definitions of quality conclude that quality does not just happen; it comes as a result of hard work and a

commitment to process excellence. Quality is seldom improved through cost reduction efforts alone but costs can be reduced by improving quality. Quality is no longer just an element of customer satisfaction, it is fundamental to an organisation's survival.

### **3.10.1 Levels of quality of care**

The approach proposed by Donabedian considers four levels at which quality may be assessed (Legido-Quigley *et al.* 2008: 37). It takes account of the actors involved in the process of care (providers, patients, communities) as well as the setting in which healthcare takes place. This classification not only distinguishes different levels of quality but also identifies specific elements that define quality at that level. At the core he places the care provided by practitioners and other providers. These are further defined by two elements of performance, technical performance and the management of interpersonal relationships. The first element depends on the knowledge and judgement used in arriving at the appropriate strategies of care and on the skills needed to implement those strategies. It is assessed in comparison with best practice. The second element relates to the way in which technical care is implemented and on which its success depends, an element that is often ignored in assessments of quality of care. The second level involves the amenities of care, focusing on the desirable attributes of the settings in which care is provided. The third level refers to the actual implementation of care, responsibility for which is shared between the provider and the patient. The final level refers to the care received by the community as a whole and considers issues of social distribution of levels of quality. Thus, according to Donabedian, the definition of quality becomes either narrower or more expansive, depending on how the concept of health and related responsibilities are being defined (Legido-Quigley *et al.* 2008: 38).

### **3.10.2 Assessing quality of care**

Donabedian pioneered this work by proposing that we can measure the quality of healthcare by evaluating its structure, processes and outcomes as adapted from the concept of input, process and output in industrial manufacturing (Legido-Quigley *et al.* 2008: 40). Donabedian also argued that before assessing quality one must decide:

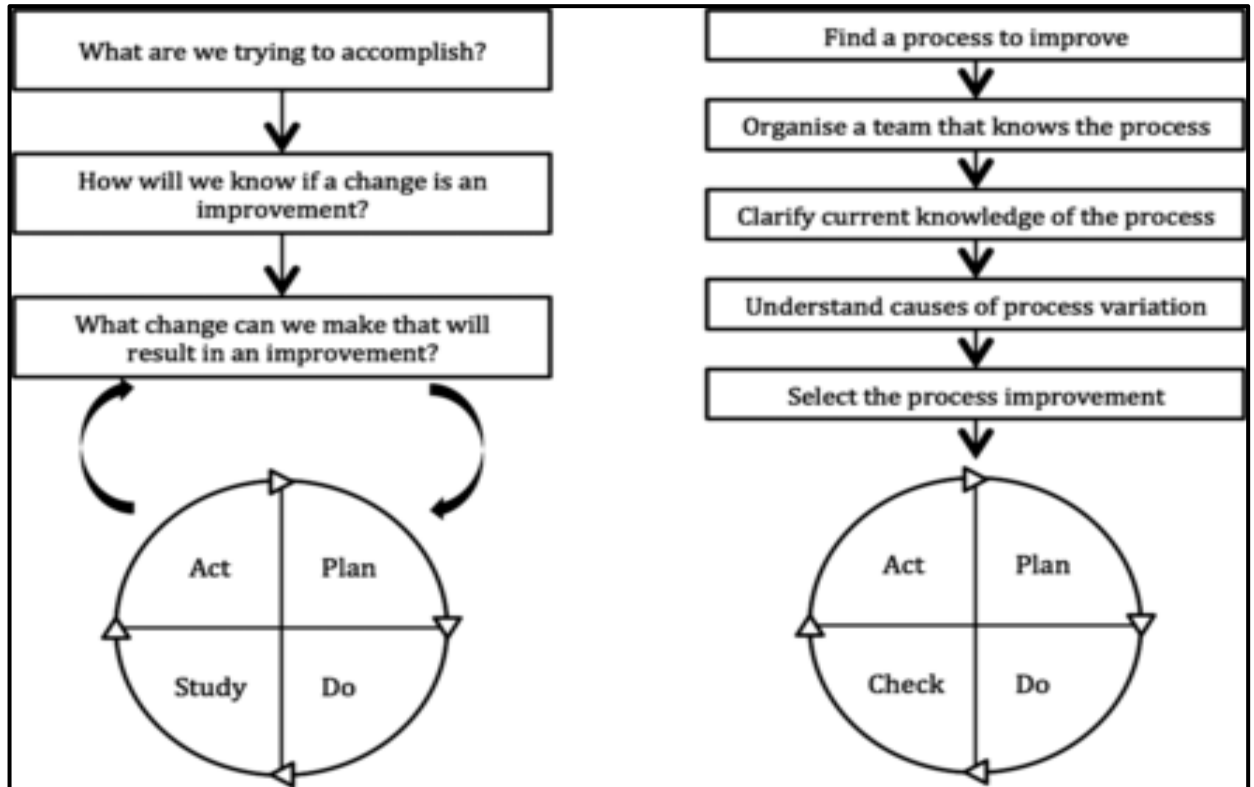
- Whether to adopt a maximal or optimal specification of quality.
- How health and our responsibility for it is to be defined.
- Whether the assessment is to involve the performance of practitioners only or also to include that of patients and the healthcare system.
- Whether the amenities and the management of the interpersonal process between patient and provider are to be included in addition to technical care.

### **3.10.3 Continuous Quality Improvement Model**

Quality of healthcare can be improved through various means. Experience over the past 100 years, beginning in industrial and commercial settings and eventually spreading to service sectors like healthcare, has shown that there is a scientific basis to improving work, a 'science of improvement', which is essentially about how to make change effective (Taylor *et al.* 2014: 290-298). The science underlying improvement draws on psychology, organisational behaviour, adult learning, and statistical analysis of variation, and is grounded in a systems understanding of work. It draws on the work of W. Edwards Deming, who inspired the quality movement in Japan in the 1950s and is considered by many as the father of quality management (Taylor *et al.* 2014: 290-298). One widely used approach to improve healthcare is the model for improvement (Taylor *et al.* 2014: 290-298). The model is a change management strategy that stems from the work of Deming and the plan-do-study-act (PDSA) cycle developed by industrial engineer Walter Shewhart in the 1920s (Taylor *et al.* 2014: 290-298). The model includes three basic questions to help structure improvement through trial and learning:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?

The PDSA and PDCA quality improvement model is depicted in Figure 3.5.



**Figure 3.5: The PDSA and PDCA model of quality improvement**

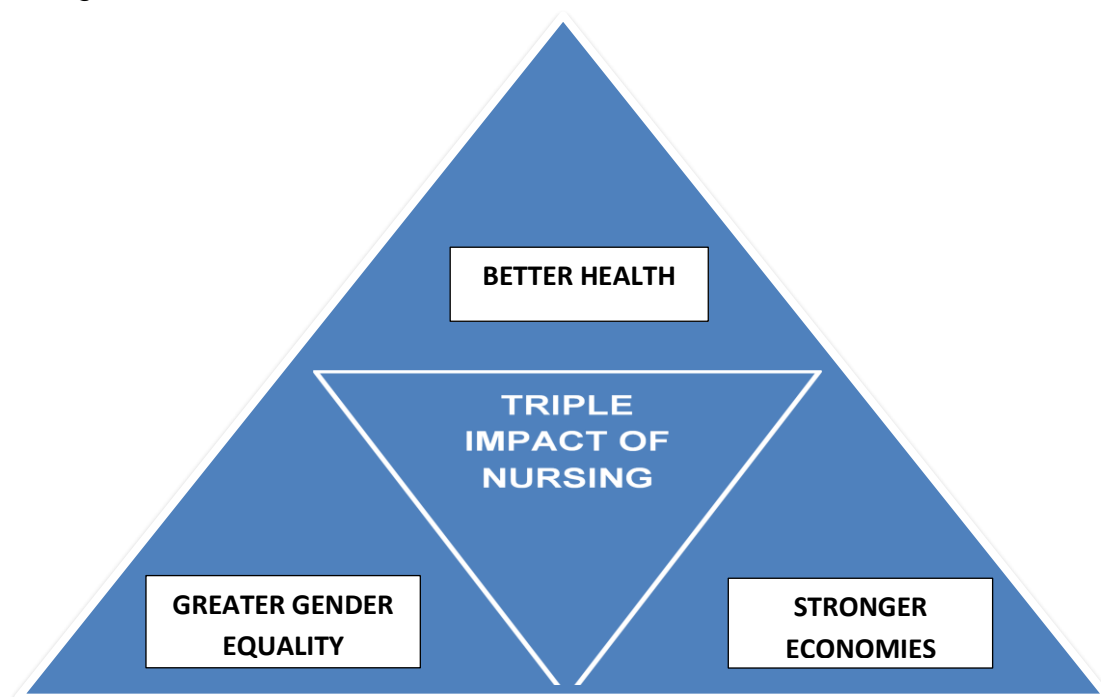
Source: Taylor *et al.* (2014: 290-298)

The terms PDSA and PDCA (plan-do-check-act) are often used interchangeably in reference to the method used. Users of the PDSA method follow a prescribed four-stage cyclic learning approach to adapt changes aimed at improvement. In the 'plan' stage a change aimed at improvement is identified, the 'do' stage sees this change tested, the 'study' stage examines the success of the change and the 'act' stage identifies adaptations and next steps to inform a new cycle. Regular measurement and analysis of quality measures is another core principle of all improvement work. However, measuring quality is not simple in any setting, so despite the challenges of a

rapidly expanding number of quality measures, much of healthcare remains poorly measured or unmeasured (Taylor *et al.* 2014: 290-298).

### 3.10.4 The Triple Impact of Nursing Model

The APPG proposes the triple impact of nursing model which makes a very clear point that universal health coverage cannot be possible without strengthening nursing globally (WHO 2016b: 1-68). This model is depicted in Figure 3.6.



**Figure 3.6: The Triple impact of nursing: better health, greater gender equality and stronger economies Source: (WHO 2016b: 3)**

This model proposes that, strengthening nursing will have a triple impact of improving health, promoting gender equality and supporting economies in countries, towards meeting citizens' accessibility to universal health coverage. The APPG recommends that countries must work together in:

- Raising the profile of nursing to make it central to healthcare policy.
- Support plans to increase the number of nurses being educated and employed globally.
- Develop nurse leaders and nurse leadership.



- Enable nurses to work to their full potential and share good practices.
- Collect and disseminate evidence of the impact of nursing on access, quality and costs and ensure that it is incorporated in policy and acted upon.
- Develop nursing to have a triple impact on health, gender equality and on economies by investing in nurses and empowering them economically and as community leaders.
- Improving health and empowering women will in turn strengthen local economies.
- Promote partnerships and mutual learning among nurses globally (WHO 2016b: 1-68).

### **3.11 SUMMARY OF THE CHAPTER**

In this chapter the different conceptual frameworks for quality of care was discussed. The conceptual framework of the NCS and Batho Pele principles chosen for the study is based on some of the concepts identified in this chapter and will be discussed in-depth in the methodology and design section of Chapter 4.

## **CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY**

### **4.1 INTRODUCTION**

This part of the thesis details the research methodology including population and sample, the research setting for the study, data collection and analysis, reliability and validity and ethical considerations used in the study. The processes and the outcomes of quality attained in private hospitals was a key focus of the study. The aim was to ultimately develop an audit tool for clinical relicensing inspections to evaluate quality and patient safety in private hospitals in eThekweni district.

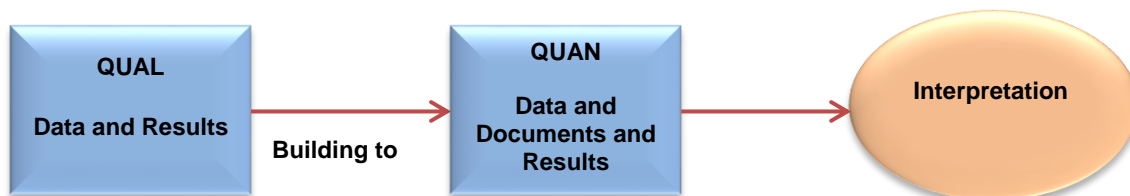
### **4.2 RESEARCH DESIGN**

According to Burns and Grove (2011: 509), a research design is the blue print used to conduct a study. It serves as a guide to planning and implementation of a study in a way that is most likely to achieve the intended goal. An exploratory descriptive design with multiple methods was used in this study. According to Polit and Beck (2014: 272), the purpose of a descriptive research design is to observe, describe and document aspects of a situation as it naturally occurs. Burns and Grove (2011: 518) argue that descriptive designs are crafted to gain more information about characteristics within a particular field of study. A descriptive design can be used to develop theory, identify problems with current practice, justify current practice, make judgements, or determine what others in similar situations are doing (Burns and Grove 2011: 518).

The researcher employed an exploratory sequential mixed methods research design (QUAL→QUAN) to assess elements from both qualitative and quantitative paradigms, followed by documentation review to produce findings in the context of complex research questions as illustrated in Figure 4.1. Polit

and Beck (2014: 272) define qualitative design as a design that merges various data collection strategies together and is capable of adjusting to new information during data collection whereas quantitative design is an investigation of phenomena that lends itself to precise measurement and quantification. It often involves a rigorous as well as a controlled design.

According to Creswell (2014: 34), mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone. A mixed method research design was chosen for this study because one data source was insufficient to fully answer the research questions. Furthermore, the results of the qualitative data required clarification hence the quantitative phase followed the qualitative phase of the study.



**Figure 4.1: The exploratory sequential design**  
Source: Creswell (2014: 281)

### **4.3 DATA COLLECTION AND INSTRUMENT**

Data collection was conducted in three phases in this mixed method exploratory sequential research design. Data was collected from primary and secondary sources as part of the mixed method research design in order to obtain information which could answer the research questions and test the conceptual framework.

**Qualitative-First Phase** data collection explored the views of the senior nursing managers who are instrumental in supervising quality and patient safety standards, using an interview guide supplemented with probing questions. The qualitative design was chosen in order allow the nurse managers to express their views in their own words and share their experiences of the current relicensing inspections as they are directly involved in regulatory relicensing process. Creswell (2014: 33) states that qualitative research methodology is used to explore and understand the meaning of individuals or groups related to a social or human problem.

The data was then analysed and the information was used to in the **Quantitative-Second Phase** to develop a structured questionnaire (Creswell 2014: 283). The qualitative phase identified specific variables which were then used to build an instrument for the follow-up quantitative phase of the study. The intent of this strategy was to develop better measurements with specific samples of populations and to see if data from a few individuals gathered in a qualitative phase can be generalised to a large sample of a population in a quantitative phase (Creswell 2014: 277). The nursing staff were the participants in the quantitative phase of the study as they are the clinicians at the bedside of the patients. The quantitative design was chosen as an appropriate method for assessing the perceptions of the nursing staff with regards to their relicensing experience as they are the staff who actually perform the clinical duties.

A **Documentation Review-Third Phase** followed the quantitative phase of the study and was used to corroborate and augment evidence from information gathered during the qualitative and quantitative phases, and identify the data's relevance to the NCS and the Batho Pele principles. The research methodology used is depicted in Table 4.1 and the operational framework that guided the study is illustrated in Figure 4.2.

**Table 4.1: Research methodology used to achieve each objective of the current study**

	<b>OBOJECTIVES</b>	<b>RESEARCH QUESTION</b>	<b>DATA COLLECTION METHOD</b>	<b>APPROACH</b>
<b>1</b>	Assess nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections for private hospitals in relation to the clinical domains of the NCS and the Batho Pele principles.	What are the perceptions of nursing staff regarding the current relicensing audit tool in relation to the clinical domains of the NCS and Batho Pele principles?	One-to-one interviews using a semi-structured interview schedule (guided by interview guide).	Qualitative
<b>2</b>	Assess the evidence-based best practice standards and their outcomes in private hospitals in eThekwin district and how these contribute to the delivery of quality healthcare to patients and users of the service.	What evidence-based best practice standards exist in private hospitals in eThekwin district and do they contribute to the delivery of quality health services for patients and users of the service?	A structured questionnaire to assess nursing staff perceptions regarding quality and patient safety standards in their hospitals.	Quantitative
<b>3</b>	The Relevance of Policies and Procedures to the NCS and Batho Pele principles	Which policy and procedure guidelines implemented are relevant to the NCS and the Batho Pele principles?	Record review using a checklist.	Quantitative
<b>4</b>	Based on the clinical domains of the NCS and Batho Pele principles to develop an audit tool for relicensing inspection of private hospitals in eThekwin district.	How can an audit tool for clinical relicensing inspections for private hospitals in eThekwin district be based on the NCS and Batho Pele principles?	Based on the findings of all the above.	

## OPERATIONAL FRAME WORK

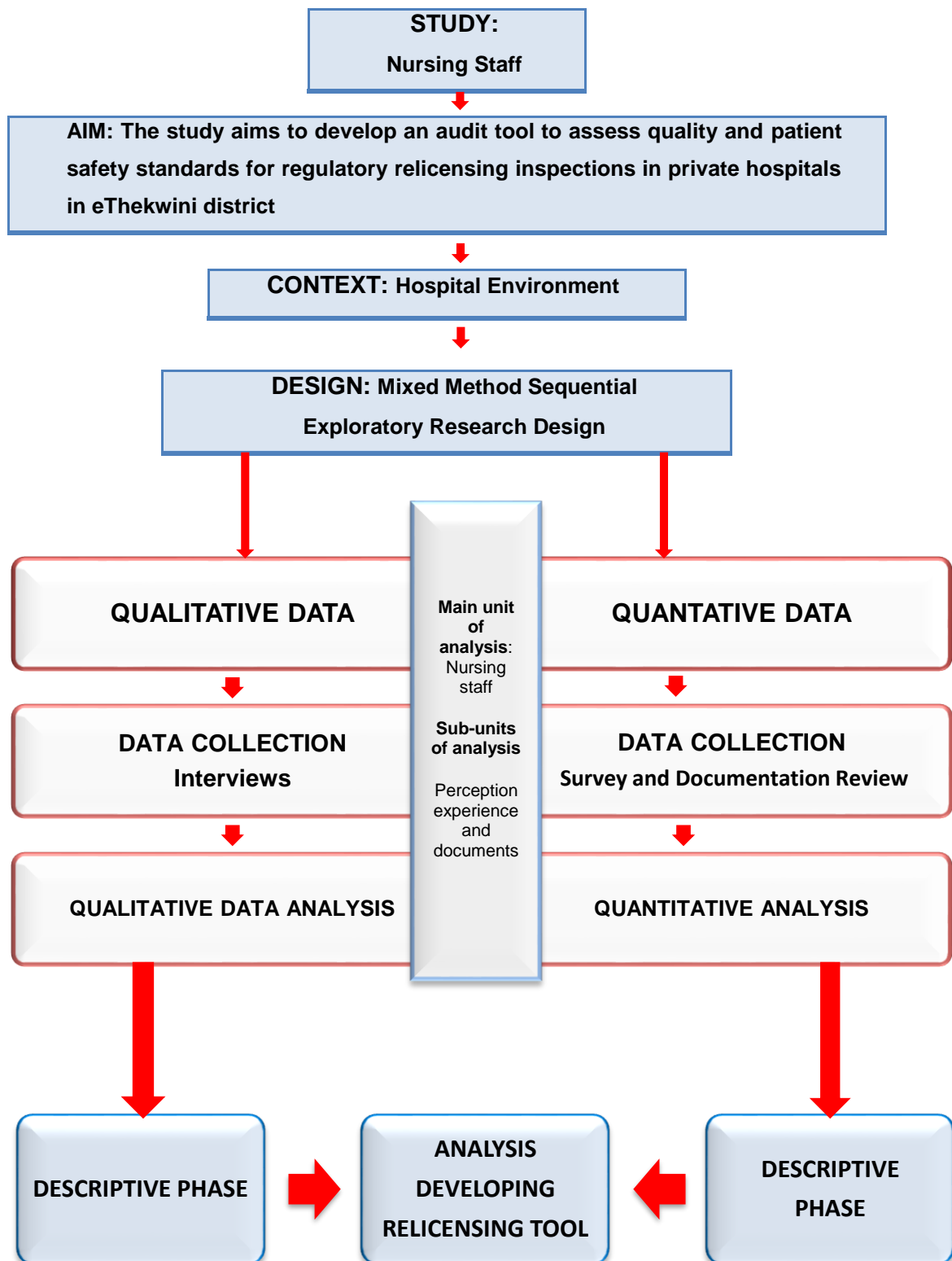


Figure 4.2: Illustration of operational framework

## **4.4 THE OPERATIONAL FRAMEWORK**

There are four basic designs available to the researcher in planning to engage in mixed methods research which relate to interaction, priority, timing and mixing of the quantitative and qualitative strands of the mixed method design (Creswell and Plano Clark 2011: 69-70), as outlined in Figure 4.2.

### **4.4.1 Mixed method research design interaction**

The mixed method design includes convergent parallel, explanatory sequential, exploratory sequential, and embedded designs. The exploratory sequential design of a mixed method approach was used in this study. This method allowed the researcher to implement the study in two phases, first the qualitative phase followed by the quantitative phase. The qualitative phase assisted in building the quantitative tool which was followed by a quantitative documentation review (Creswell and Plano Clark 2011: 70).

### **4.4.2 The priority of the qualitative and quantitative strands**

The nature of the study called for the qualitative and quantitative phases to be given equal priority. Creswell and Plano Clark (2011: 65) describe priority as referring to the relative importance or weights of the qualitative and the quantitative methods for answering the study's questions. The authors distinguish between equal, qualitative, or quantitative priorities.

### **4.4.3 Determining timing of qualitative and quantitative strands**

Timing refers not only to the time of data collection but also to the order in which the researcher will use the data (Creswell and Plano Clark 2011: 65). The authors differentiate between concurrent, sequential and multiphase combination timing (Creswell and Plano Clark 2011: 66). The study was conducted using an exploratory sequential design implying that both strands were used in different phases. The qualitative data analysis led to the development of the instrument to be used in the quantitative phase of the

study. The researcher used sequential timing to implement the qualitative and quantitative strands of the research process, prioritising the methods equally, and kept the two strands independent during analysis.

#### 4.4.4 Mixing of data sets: Determining when and how to mix data sets

Creswell and Plano Clark (2011: 66-67) distinguish between four distinct levels at which data sets can be mixed. These include: mixing during interpretation, during data analysis, during data collection or at the level of design. Data mixing for the current study was done during data analysis in the first stage and during data interpretation in the second stage. The researcher first individually analysed each strand of data. By analysing the results of the qualitative strand an instrument was developed to assist with the quantitative strands of the study. Mixing in exploratory sequential mixed method design involves the connecting of data which means that the analysis of one data set is used to build into the second data set (Creswell 2014: 282). In short, the data analysis of one data set informs the data collection of the other data set as depicted in Table 4.2.

**Table 4.2 Mixing of datasets**

Type of mixing	Type of design	Why mixing occurs	Where mixing occurs
Connecting	Sequential	One phase builds on the other	Between data analysis (Phase 1) and data interpretation (Phase 2)

Source: Creswell and Plano Clark (2011: 66-67)

By using this approach, the researcher was able to draw on both the qualitative and quantitative data strands to bring together the strengths of both forms of research, and to compare and corroborate the results of the findings. The researcher learned from the qualitative strand how the nurse managers perceived the current relicensing inspections and in the quantitative strand the experiences of the staff on the ward level. Combining the two results assisted the researcher to draw conclusions about the best practices to include in the



development of a clinical audit tool for relicensing inspections for the private sector in eThekweni district.

#### **4.5 PHILOSOPHICAL UNDERPINNING OF THE STUDY**

The questions that nurse researchers ask, and the methods they use to answer their questions, spring from their view of how the world 'works' (Polit and Beck 2014: 33). Worldviews can be seen as a general philosophical orientation about the world and the nature of research that a researcher brings to a study. The types of beliefs held by individual researchers based on these factors will often lead to embracing a qualitative, quantitative, or mixed methods approach in their research (Creswell 2014: 36).

Pragmatism is generally regarded as the philosophical partner for the mixed methods approach. It provides a set of assumptions about knowledge and enquiry that underpins the mixed methods approach and which distinguishes that approach from purely quantitative approaches that are based on a philosophy of post-positivism and purely qualitative approaches that are based on a philosophy of interpretivism or constructivism (Johnson, Onwuegbuzie and Turner 2007: 126). It is argued that pragmatism is a well-developed and attractive philosophy for integrating perspectives and approaches. To pragmatists what is "true" is what 'works'. Pragmatism offers an epistemological justification, through pragmatic epistemic values or standards and logic, of the combination of methods and ideas chosen to frame, address, and provide tentative answers to one's research questions, and for mixing approaches and methods. Pragmatists reject the incompatibility thesis and claim that research paradigms can remain separate, but they also can be mixed into another research paradigm. Another attractive feature of pragmatism for mixed methods research is that it draws from a wide range of theorists that mixed methods researchers can consider (Johnson, Onwuegbuzie and Turner 2007: 126).

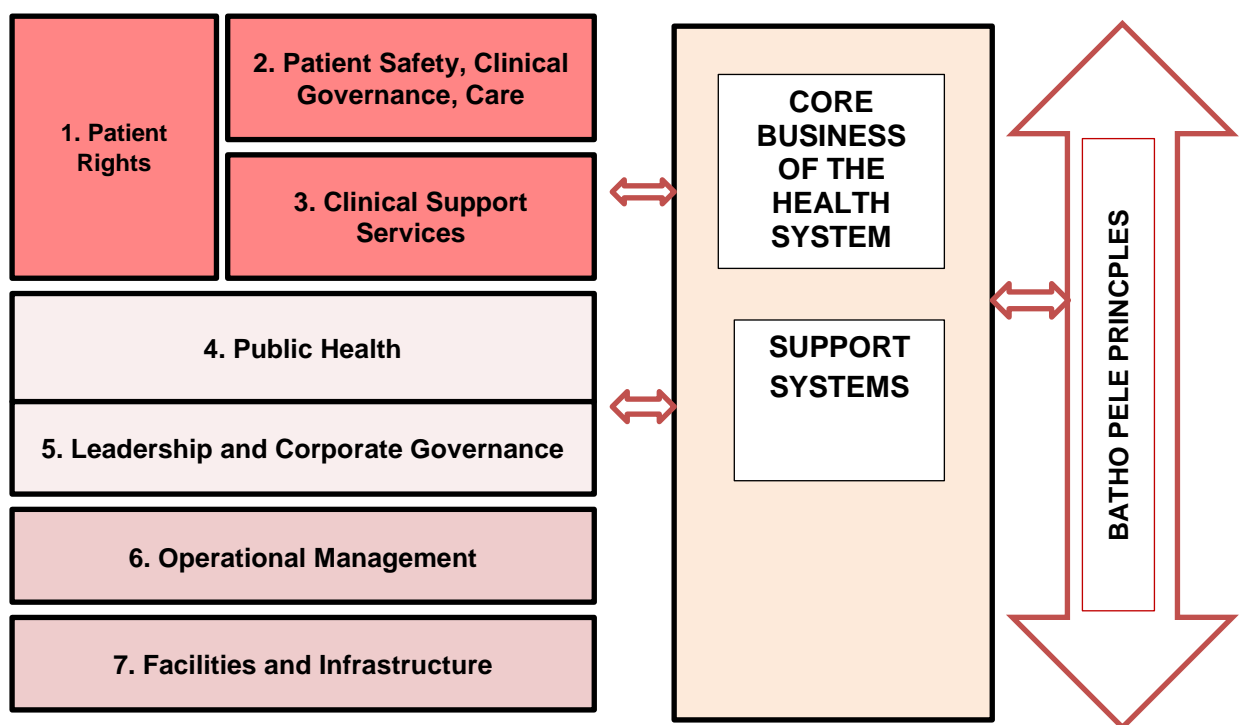
Thomas Kuhn (1962 cited in Johnson, Onwuegbuzie and Turner 2007: 130) popularised the idea of a paradigm. Research paradigm means a set of beliefs, values, and assumptions that a community of researchers has in common regarding the nature and conduct of research. The beliefs include, but are not limited to, ontological beliefs (it is the truth that works), epistemological beliefs (relationship between researcher and participant), axiological beliefs (the values of the researcher), aesthetic and methodological beliefs. In short, a research paradigm refers to a research culture. It can, therefore, be argued that there is now a trilogy of major research paradigms: qualitative research, quantitative research, and mixed methods research (Johnson, Onwuegbuzie and Turner 2007: 131). The use of these philosophical assumptions in this mixed method research study assisted the researcher in conducting the qualitative and quantitative phases of the study.

#### **4.6 HOW THE CONCEPTUAL FRAMEWORK OF THE NATIONAL CORE STANDARDS AND THE BATHO PELE PRINCIPLES GUIDED THE STUDY**

The NCS for Health Establishments in South Africa was first launched in 2008 and reflect the Department of Health vision for South Africa's health services and focuses on what needs to be done to meet that vision. The standards are based on the existing policy environment and are tailored to suit South Africa's healthcare context and reflect international best practice which is evidence-based. The NCS Framework reflects what is expected and required to deliver decent, safe, quality care and are complemented by a set of measurement tools to assess compliance with these measures in public hospitals (Department of Health 2011: 8-45a).

The NCS are structured into seven cross-cutting domains to reflect a health systems approach and define the scope or intent of assessing a health area where quality or safety might be at risk. The first three clinical domains relate to the core business of the health system , (the focus of this study) while the

final four domains refer to the support system that ensures that the former are delivered. These domains are further divided into sub-domains which comprise a set of standards with associated measurement criteria and measures. The public hospitals are currently trained by the Department of Health to implement the NCS in the public hospitals but there is little emphasis of the NCS in the private sector. The seven cross-cutting domains are dependent on each other for quality management and patient safety (Department of Health 2011: 10a). The seven cross-cutting domains of the NCS are illustrated in Figure 4.3.



**Figure 4.3: The seven cross-cutting domains of the NCS**  
Source: Department of Health (2011: 10)

The above conceptual framework with the Batho Pele principles was used to guide the research in all three phases of the study. The emphasis was on the clinical domains, of Patient Rights, Patient Care, Clinical Governance, Safety and Clinical Support Services domains. The researcher set out to find, how the various processes within the clinical domains were assessed during relicensing inspections and how the current best practices at the organisations provide quality and patient safety in terms of the requirements

of the National Quality Policy. Concepts of training and development of staff, effective communication, monitoring and feedback to clients, leadership involvement, regulation and strategies on quality, effective teams ,incentives and staff recognition that were found to be common to all the quality frameworks, discussed in chapter three, were considered during the data collection processes of the study. The clinical domains of the NCS provide a simple framework for excellent performance covering all angles and aspects of an organisation and its clinical processes (Whittaker *et al.* 2011: 63). During data analysis and interpretation of the research findings the conceptual framework of the NCS and Batho Pele principles was used as a guide to corroborate findings of the results which led to the development of a proposed audit tool for clinical relicensing inspection for private hospitals in eThekweni district.

#### **4.7 RESEARCH SETTING**

Research setting is the physical location in which data collection takes place (Polit and Beck 2010: 130). The research setting was a group of four private hospitals situated in the eThekweni district. Three of the hospitals are situated in the central eThekweni district and one on the South Coast. The group comprises 650 beds with average bed occupancy of about 80%. It has 17 operating theatres and 60 adult ICU and 20 NICU beds. The group has an average intake of 5700 inpatients and 2000 outpatient visits per month. The clinical governance of the hospital is supported by a well-established Quality System, Health and Safety Committee, Infection Control Committee, Pharmaco-therapeutics Committee and an Ethics Committee. The organisation is a member of the HASA and affiliates itself with well-established clinical forums in the eThekweni district of which its staff are members. These clinical forums are the KZN Specialist Forum for Antimicrobial Stewardship and the forum for Nurse Leaders and Nurse Educators Association. The hospitals are regulated by the eThekweni Department of Health and seek relicensing on an annual basis.

#### **4.8 POPULATION AND SAMPLING**

Population, also referred to as the target population, is all the elements which meet specific criteria to be included in the study (Burns and Grove 2011: 579). The population for the study consisted of nursing staff at the four hospitals in the study and during the documentation review, various policy and procedures were reviewed relevant to the quality and patient safety standards as related to the NCS and the Batho Pele principles. Sampling is the process of selecting a portion of the population to represent the entire population so that inferences about the population can be made (Polit and Beck 2012: 339). A purposive, non-probability sampling strategy was used to recruit nurses to participate in the interview. Purposive sampling is a qualitative sampling strategy which is used to sample people who have experience of the phenomenon under study (Burns and Grove 2011: 580). In the qualitative and quantitative phases of the study, consenting professional nurses, enrolled nurses and enrolled nursing assistants registered with the SANC and able to speak English were included in the study. The researcher invited the nurses from the different units in the hospitals to participate. Nurses who met the criteria were provided with information on the research and invited to participate. Agency staff who were not directly involved in the regulatory inspection and the non-clinical staff were excluded from the study. Participants who were selected were considered to be knowledgeable about the phenomenon being explored. In the qualitative phase of the study, the target populations were all the clinical managers and in the quantitative phase the nursing staff in direct contact with the patients. This group of hospitals has approximately 40 clinical managers who were purposively sampled for the qualitative phase as they are directly involved in relicensing inspections. The number of managers that were interviewed face- to- face were (n=24) guided by data saturation. The clinical managers are unit managers (middle management) and nursing services managers (higher management) in charge of all clinical services in the hospital. The quantitative phase of the study included nursing staff in direct contact with the patients. The total population of nurses is 569 of which 270 were sampled for the study (Table 4.3). The

researcher had obtained the advice of an expert statistician on population and sampling.

**Table 4.3: Population and sample size**

POPULATION	RN	SN	ENA	Total	SAMPLE	RN	SN	ENA	Total
HOSP A	69	120	51	240	HOSP A	33	57	24	114
HOSP B	58	84	38	180	HOSP B	28	40	18	85
HOSP C	41	36	19	96	HOSP C	19	17	9	46
HOSP D	17	23	13	53	HOSP D	8	11	6	25
TOTAL	185	263	121	569	TOTAL:	88	125	57	270

#### **4.8.1 Inclusion criteria**

- Professional nurses, enrolled nurses and enrolled nursing auxiliaries at the hospitals that were managing and providing direct patient care and were responsible for implementing the quality and patient safety policy.
- Professional nurses, enrolled nurses and enrolled nursing auxiliaries at the hospitals that were registered with the SANC and partake in inspections.
- Hospital documentation related to the NCS and the Batho Pele principles.

#### **4.8.2 Exclusion criteria**

- All the categories of nurses who were employed as agency staff.
- All nurses that were not registered with the SANC.
- All non-clinical members of staff.
- All staff that were used for the pre-testing of data collection instruments and procedures.

### **4.9 PRE-TESTING OF THE DATA COLLECTION TOOLS**

In order to have the practical aspects of any study tested, a researcher has to conduct a pre-test. This is usually accomplished by including a few participants that meet the inclusion criteria, but they do not form part of the

sample, and the data collected in this instance is not included in the study (Creswell 2014: 207).

A pre-test was conducted before the commencement of the main study in order to establish reliability and validity of the data collection instruments. The pre-test was also used to identify whether there was a need to refine the methodology or the data collection processes. The researcher requested four nursing managers, two from hospital A and two from Hospital B, to participate in the qualitative phase using the semi-structured interview guide (Appendix 5). The pre-test interviews were recorded with an audiotape and field notes were also taken. All data collected during the pre-test was analysed and interpreted. The main focus was to check the validity and reliability of the data collection instruments. The pre-test results assured the researcher that the research processes and procedures were appropriate for the study. No changes were implemented in the data collection instruments. The time taken to complete the interview was on average 30 minutes in the qualitative phase of the study and the average time for the questionnaire (Appendix 6) in the quantitative phase was 20 minutes. The pre-test participants' data and results were not included in the main study.

#### **4.10 DATA COLLECTION PROCESS**

Data collection was conducted in three phases. Phase 1 began with the qualitative strand of the study and sought to assess how the nurse managers perceived the current clinical audit tool used in relicensing inspections in relation to the clinical domains of the NCS and the Batho Pele principles. It also aimed at assessing the evidence-based best practice standards and their outcomes in private hospitals in eThekweni district and how these contribute to the delivery of quality healthcare to patients and users of the service. In Phase 2, the quantitative strand of the study was undertaken and intended to explore the experiences of the nursing staff that are on the ward level and in direct contact with patient care and patient safety, who also form part of the annual relicensing inspection team. In Phase 3, a documentation review to

assess the relevance of the policy and procedures at the research sites in relation to the NSC and Batho Pele principles was undertaken. The researcher conducted all phases of the research study on her own.

#### **4.10.1 Qualitative data collection: Phase 1**

Data collection in the qualitative phase consisted of using individual face-to-face in-depth semi-structured interviews with the participants. All the participants who agreed to take part in the study signed an informed consent form (Appendix 4b). Informed consent included an explanation of the handling of all interview materials, confidentiality issues and anonymity procedures for participants, and the option to withdraw at any time (Appendix 4a). Hospitals and participants were coded to ensure anonymity. Once informed consent was obtained, all interviews were scheduled for a time that was most convenient for each participant and also for the health service. A private room was organised at each study site to use for the interviews in order to ensure that the interviews were conducted in a suitable environment that facilitated the participants talking freely. The time taken to complete the interviews was aimed at 30 minutes.

The researcher started each interview with a general introduction and information guide and explained the purpose of the study and how it would benefit the individual and the organisation as a whole, in an effort to minimise inaccuracies in the interview data. The interviews were recorded and transcribed verbatim by the researcher with the permission of the participants. The qualitative phase was used to describe the experiences of nurse managers regarding relicensing inspections and how they relate to the NCS and the Batho Pele principles using a semi-structured interview guide with open ended questions. During the face- to-face interviews there were no participants distressed or showing signs of fear. Participants spoke freely and the researcher used probing where necessary to obtain in-depth information on the issue (Appendix 5). Probing questions were used to further clarify and to uncover answers, where participants were required to explain or build on



their responses. This provided the researcher with a rich source of data and information for interpretation and analysis. Data collection continued until the point of data saturation, that is when the researcher stopped collecting data because fresh data no longer sparked new insights or revealed new properties (Creswell 2014: 297).

To validate the concepts emerging during the interview, the researcher checked the transcripts and met with the participants and invited them to check the transcripts as an accurate representation of what was said at the interview, before commencing data analysis. Participants returned their transcripts without any changes. At the end of the interview each participant was asked if they were satisfied with how the interview had been conducted. An opportunity was also given to participants to indicate any additional information they considered to be relevant. The semi-structured interview approach allowed for flexibility so that the interview was more like a conversation, while the focus was geared towards the key issues of the research questions. The interview questions were designed to address specific research questions. This enabled the researcher to link what was asked in the individual participant interviews to the overall research questions and enabled the researcher to develop themes as they emerged.

The individual semi-structured interviews allowed the nurse managers to share their personal views and experiences regarding the current relicensing inspections without any fear of intimidation by the rest of the group. The interviews lasted from on average 30 minutes. This time period allowed the researcher not only to ask the predetermined questions, but also to obtain rich detailed answers as the nursing managers related their experiences of the current relicensing inspection in a way that they felt comfortable. The limitations of the one-to-one interview are that the interview requires that the interviewer must be knowledgeable about the subject, be able to probe, and be able to exercise good control as interviewees' responses might be irrelevant to the topic. The researcher, with her experience and skills as a nursing manager, was able to conduct and control the semi-structured

interviews. All the interviews were conducted by the researcher during her visits to the four research sites.

#### **4.10.2 Quantitative data collection: Phase 2**

In this sequential mixed methods research design, data collection in the quantitative phase of the study proceeded from the qualitative phase after data analysis and development of the quantitative instrument. Data collection during this phase was by means of a structured questionnaire. The questionnaire had a seven point Likert scale to measure participants' responses and covered the first three clinical domains of NCS and Batho Pele principles underpinned by literature. The seven point scale was used to provide the participants with more options to choose from and obtain more specific than general responses. The seven point Likert scale has been shown to reach the upper limits of the scale's reliability (Allen and Seaman 2007: 64-65). Demographic data was also included. The questionnaire comprised of close questions and one open-ended question, checked by an expert statistician (Appendix 6). The themes from the qualitative phase of the study led to the development of the quantitative instrument. The participants were all the nursing staff on the ward level in direct contact with the patients. The researcher during her weekly visits to the research sites invited the participants to take part after briefing them using the information letter (Appendix 4a). All the participants who agreed to take part in the study signed an informed consent form (Appendix 4b). Informed consent included an explanation of the handling of all interview materials, confidentiality issues and anonymity procedures for participants, and the option to withdraw at any time. Once informed consent was obtained, all participants were handed the questionnaires in sealed envelopes and on completion was handed back to the researcher for safe keeping. The questionnaires on average took about 20 minutes to complete. The completion of the questionnaires was scheduled for a time that was most convenient for each participant and also for the health service. A private room was organised at each study site for the participant to complete the questionnaire during their break.

#### **4.10.3 Documentation review: Phase 3**

The secondary data was derived with permission of the employer (Appendix 2b) from documents such as the organisational specific policies and procedures. It represented the data to which participants had given attention to during the qualitative and quantitative phases of the study that could not be observed during the qualitative and quantitative phases of the data collection process (Creswell 2014: 244). This phase assisted the researcher to contextualise the quality concepts and constructs raised by the participants during the first two phases of the study and compare the organisations current quality system to the concepts in the study's conceptual framework. The NCS (Department of Health 2011: 1-52a) and Batho Pele principles (Republic of South Africa 1997: 1-25) are two of the documents on which the documentation review was based and offered guidance on the policies and procedures required to provide quality and safe patient care. A checklist was used to collect the information based on the concepts identified by the participants in the qualitative and quantitative phases of the study relating to quality and patient safety, and as shown in (Appendix 7). The ability to collect data by means of three different research methods provided for triangulation of data sources and a thick description of the phenomena at hand. The thick description and triangulation of data sources further provided for greater trustworthiness and validity of the data obtained. All documents were collected in their original forms with no modification whatsoever by the researcher.

#### **4.11 DATA STORAGE**

The researcher used both a voice recorder and field notes to collect and store data in the qualitative phase of the study. The voice recorder was used to record the interviews with the nurse managers in order to ensure that voices of the participants were kept alive to convey the actual verbatim message of the participants. Field notes were used to support the recorded information. The participants were advised during the information sharing session that the interviews would be recorded and field notes taken and were reminded again

before each interview commenced. The questionnaires from the quantitative phase of the study and the documentation review together with the voice recording tapes were collected and placed in sealed boxes and kept in the researcher office for safe keeping for a period of 2 years. After 2 years the documents will be destroyed with permission of the University.

## **4.12 DATA ANALYSIS**

The study consisted of two data sets: qualitative data and quantitative data, both of which needed to be analysed and interpreted in order to conclude study findings and to develop a clinical relicensing audit tool during the final stage of the study.

### **4.12.1 Qualitative data analysis**

The approach adopted for qualitative data analysis was an inductive approach. An inductive approach has its roots in social science and seeks to interpret data in order to address a problem or answer questions that are raised at the outset of the research (Thomas 2003: 2). The inductive approach supports the philosophical approach of interpretivism when analysing the data. In order to satisfy the research objectives, the data analysis process began during the data collection period. After each interview, the researcher reviewed how participant responses would help the study to answer the research questions. The researcher personally transcribed each interview within 48 hours of conducting the interview. The voice recorded responses were listened to again and again thereafter transcribed and compared to the transcribed data. Information from the field notes was compared to that on the audiotape to make sure that all data had been captured correctly. During the transcription phase the researcher conducted a preliminary analysis. The researcher focused on describing how many times different categories appeared in the data and linked the codes to create meaning. Important quotations from the participants' responses were identified. The concepts were then translated into codes, codes into themes and categories. The

themes according to which data was organised were predetermined according to the conceptual framework that was guiding the study. The domains of the NCS and the Batho Pele principles were used to organise the data.

A manual process of reading and checking the data was undertaken by the researcher to check the accuracy of the transcribed interview data. The coding process was quite iterative and tedious which involved a process of constant comparison to the research questions. The researcher spent about a month coding the data to ensure that the right data was coded to the right code. All the responses to a particular interview question were coded together and this new code was checked against the conceptual framework and literature review. This further helped to improve the rigour of the analysis process by validating the researcher's own interpretation of the data.

The analysis of the results of the qualitative data was conducted in two ways, according to the structural model (coding rubric), and a thematic synthesis of the qualitative findings. Coding of the data assisted the researcher identify the various constructs, variables and themes in the data collected. According to Thomas and Harden (2008: 45) thematic synthesis has three stages:

- The coding of text line-by-line; the researcher identified, arranged, and systematised the ideas, concepts, and categories uncovered in the data and transformed the raw data into codes.
- The development of descriptive themes, the researcher used thematic analysis using coding rubric to connect the data to the domains of the tool being developed.
- The generation of analysis, which represented a stage of interpretation whereby the researcher 'went beyond' the primary studies and generated new interpretive constructs, explanations and hypotheses (Thomas and Harden 2008: 45).

The findings of this phase contributed richly to the development of a quantitative survey tool through validating existing theory and by providing a thick description of the research findings (Zhang and Wildemuth 2010:

12).The quantitative tool was developed and checked by an expert statistician before implementation (Appendix 8).

#### **4.12.2 Quantitative data analysis**

Four of the six steps of quantitative data analysis as described by Burns and Grove (2009: 461) were followed. These included: preparation of data for analysis, description of the sample, testing of reliability of measurement and descriptive analysis of the data. The researcher used the SPSS version 24.0 for data analysis. A descriptive analysis was used to examine the relationship between the variables. The assistance of an expert statistician was included during the analysis phase of the study (Appendix 8).

##### **4.12.2.1 Preparation of data for analysis**

In this step data coding and cleaning was done. The first step after data collection was to embark on data coding where data was transformed into symbols (Polit and Beck 2012: 642). Data was thereafter captured into an electronic spread sheet. The next step involved data cleaning process as part of data quality check to ensure the accuracy and integrity of the data. This process involved checking the data line-by-line and looking for any discrepancies, inconsistencies and inaccuracies that did not make sense.

##### **4.12.2.2 Description of the sample**

This step included obtaining a complete picture of all quantitative data collected (Burns and Grove 2009: 462). Comparisons were made between data collected from the different hospitals in order to ensure that the data obtained represented the study population. Description of the study was particularly important because the researcher intended to compare the findings between the four hospitals involved in the research.

#### 4.12.2.3 Testing the reliability of measurement

According to Burns and Grove (2009: 222), a measure is a reliable measure if it gives the same results each time the same situation or factor is measured. Although this was ensured first by doing a pre-test and close monitoring throughout the data collection, it was important that additional evaluation was done before data analysis

#### 4.12.2.4 Exploratory analysis of the data

All data collected were examined descriptively in order to become as familiar as possible with the nature of the data. Each variable was examined in order to establish that data were normally distributed and not skewed (Burns and Grove 2009: 463). Chi-square goodness-of-fit-test was applied, which is a univariate test, used on a categorical variable to test whether any of the response options are selected significantly more/less often than that of the others (Burns and Grove 2009: 690).

### **4.12.3 Documentary data analysis**

Quantitative content analysis was used to analyse the documentation review using a deductive approach. The goal was to identify important themes or categories within the content of the documents that corroborated with findings of both phases of the study and to provide a rich description of the social reality created by those themes/categories as related to the NCS and the Batho Pele principles. Through careful data preparation, coding, and interpretation, the results of the quantitative content analysis of the document review the researcher was able to compare the findings with the conceptual model used in the study as well as with the findings of the first two phases of the study. This phase also contributed to the development of the proposed clinical audit tool through validating existing theory and by providing a thick description of this research setting and how it maintains its internal quality system (Zhang and Wildemuth 2010: 12).

#### **4.13 MIXING OF DATA FROM THE TWO STRANDS (QUALITATIVE AND QUANTITATIVE)**

The researcher collected qualitative and quantitative data in two different phases followed by documentation review. The data sets were analysed independently using analytic approaches suited for each strand. The results of the data sets were then compared. The first three clinical domains of the NCS and Batho Pele principles were used to guide the analysis and the comparisons of the qualitative and quantitative results. Further analysis included triangulation of the data sets and interpreting how the merged results answered the research questions and led to the achievement of the study's objectives.

#### **4.14 TRIANGULATION**

All data gathered during the study were triangulated and the results of triangulation are presented in Chapter 6 and Chapter 7. Triangulation is defined as a process and/or outcome which involves the combination and comparison of multiple data sources, data collection and or analysis procedures, research methods and inferences that occur at the end of the study (Teddle and Tashakkori 2009: 32-33). Triangulation was used to add richness to the study and to substantiate selected aspects of text. The researcher decided to use the process of triangulation because drawing data from sources that have different potential threats to validity would possibly reduce the chances of reaching false conclusions (Bergman 2008: 23). In the current study, data from the qualitative phase was triangulated with that from the quantitative phase and documentation review phase in order to achieve two purposes in line with Bergman's stipulations which are: triangulation as validity checking and triangulation as seeking complementary information. Multiple sources of data were used in the study. In Phase 1, data were obtained through interviews using a semi-structured interview guide from the nurse managers while in Phase 2 data were collected from nurses on the ward level in direct contact with patient care using a structured questionnaire. In Phase 3, a documentation review was used based on a checklist. It is



believed that the use of triangulation of both methods and the data collection gave a more comprehensive and in-depth picture of the phenomenon under investigation.

#### **4.15 DATA INTERPRETATION**

Once data analysis was completed, the researcher developed the inferences and meta-inferences by interpreting the study's findings, looking across the qualitative and quantitative results and making an assessment of how the information addressed the mixed method question in the study (Creswell and Plano Clark 2011: 212). In this study, the inferences included interpretations and conclusions drawn from each strand while the meta-inferences were drawn across the qualitative strands and quantitative strands.

#### **4.16 RESEARCH TRUSTWORTHINESS (QUALITATIVE) AND RESEARCH RIGOUR (QUANTITATIVE)**

The researcher ensured rigour for both qualitative and quantitative methodologies as the two strands are both incorporated in the mixed method design. The most important steps in mixed methods studies is when the results from the study's qualitative and quantitative strands are incorporated into a coherent conceptual framework that provides an effective answer to the research question (Teddlie and Tashakkori 2009: 286).

##### **4.16.1 Research trustworthiness (Qualitative)**

As qualitative research has an element of subjectivity, and is open to criticism, it is important that the study and the findings should provide evidence of validity and reliability (Polit and Beck 2012: 174). Research rigour in qualitative research is associated with openness, relevance, epistemological and methodological congruence, scrupulous adherence to a philosophical perspective, thoroughness in collecting data and consideration of all the data during the analysis process and the researcher's self-understanding (Burns and Grove 2009: 54). Procedural rigour was ensured through precise documentation of all the steps and processes taken to conduct the study and

how the decisions were reached amounting to the establishment of an audit trail. Interpretive rigour was ensured by basing the data analysis on the three clinical domains of the NCS and the Batho Pele principles as the conceptual framework that was used to guide the study and constantly adhering to the strategies that were inherent within the qualitative design during the data interpretation stage. The researcher used a voice recorder to ensure that data were accurately recorded and representative of the data as a whole. Verbatim translation of data included non-verbal cues displayed by the study's participants during the interviews. The techniques to ensure trustworthiness followed Lincoln and Guba's recommendations (1985 cited in Loh 2013: 5) using the criteria of credibility, dependability, confirmability, and generalizability.

#### 4.16.1.1 Credibility

Credibility refers to confidence in the truth of data and the interpretations of them (Polit and Beck 2012:175). Lincoln and Guba (1985 cited in Shenton 2004: 64) argue that ensuring credibility is one of most important factors in establishing trustworthiness. In this study the researcher ensured credibility of data by recording all the interviews with the study participants and using their direct quotations and narratives during data reporting. To establish confidence in the truth of the findings, during report writing voice recordings were replayed repeatedly to ensure that all the information was transcribed. Credibility was also ensured by making sure that data from the record reviews were taken as is and the researcher remained as neutral as possible during the interviews so as to ensure that the researcher did not influence the responses by the participants. Prolonged engagement was maintained with the participants by staying in the field of study until data saturation was reached (Polit and Beck 2012: 584). The researcher spent sufficient time with the participants during the data collection stage, which increased the level of trust between the researcher and the participants.

Informal member checking was conducted during the interviews through clarification with the participants. This was achieved through the researcher summarising and re-stating the group's findings during the interview. Findings were confirmed with a group of participants after the final coding of themes to verify the truth of findings. The researcher used these techniques to ensure a rich, robust, and comprehensive account of the data was collected during the study.

The researcher is a major instrument in the data collection and analysis process. The experiences, qualifications and prior knowledge the researcher brings to the research field is an important indicator of the credibility of the researcher (Patton 2002: 566). The researcher has over 40 years of experience in nursing practice, during which time she has assumed the roles of registered nurse, registered midwife, theatre nurse and nurse manager and has led many quality and patient safety initiatives in a management capacity. This has enriched the researchers experience in quality and patient safety. The researcher has also engaged in a master's research programme which focused on quality and patient safety in an operating theatre environment and is passionate about quality and patient safety improvement initiatives. The researcher's supervisor and co-supervisor are highly experienced in supervision of postgraduate degrees and were actively involved in the data collection and analysis phase of the study.

Shenton (2004: 67) acknowledges the frequent discussion between the researcher and her supervisors as an important tool to ensure credibility, as it widens the view of the researcher to the study, opens the opportunity for alternative approaches and assists the researcher to recognise her own bias. The researcher maintained continuous communication, through meetings and discussions, with her experienced research supervisors, who verified all the stages of this study.

#### 4.16.1.2 Dependability

Dependability refers to the stability or reliability of data over time and conditions (Polit and Beck 2012: 175). Dependability is reliant on credibility. The reliability of the data collected during the qualitative phase was ensured through triangulation of the data methods, in which the researcher overlapped the different data methods to ensure trustworthiness. Thick and dense description of the research methodology used to conduct the study and dense description of sample characteristics, context of the study, data collection methods and data analysis processes were detailed, with literature support included. A dependability audit was conducted examining the process used to collect data, the accuracy of the data collected and how it was kept (Lincoln and Guba 1985 cited in Loh 2013: 5). An audit trail will be maintained through safe keeping of raw data of each interview transcript for future reference. Although the researcher coded the interviews herself, the data and analyses were checked for discrepancies by the research supervisors who acted as independent coders.

#### 4.16.1.3 Confirmability

According to Lincoln and Guba (1985 cited in Loh 2013: 5) confirmability refers to the degree to which the researcher can demonstrate neutrality of the research interpretations. In qualitative research, confirmability focuses on the characteristics of the data gathered in the study and through establishment of an audit trail. A confirmability audit trail was conducted to confirm findings, interpretations and recommendations supported by data (Lincoln and Guba 1985 cited in Loh 2013: 5). An audit trail was created which included the following measures:

- All raw data, analysed data, products of reconstructed data, and drafts of final reports were kept, and are being secured in safe keeping for two years.
- The researcher collected data until data saturation was reached.

- Independent data coding was done by the researcher. The researcher's interpretations were scrutinised by the research supervisor who acted as an independent coder. Consensus was reached after discussion about the emerging themes.

#### 4.16.1.4 Generalisability

The ability to generalise the finding of the study was ensured through the criteria of thick description as stated by Lincoln and Guba (1985 cited in Shenton 2004: 69) being an in-depth study of the actual situation being investigated and the context in which it is surrounded. Data was collected and analysed in sufficient detail to provide a baseline understanding for subsequent work to be undertaken, and for comparison with other similar studies, and for generalising to the larger population. The researcher further ensured trustworthiness of the qualitative data by efforts to confirm that the findings accurately reflected the experiences and viewpoints of participants, rather than the researcher's perceptions (Polit and Beck 2014: 78). The richness of the qualitative findings was used to build a quantitative tool.

### 4.16.2 Research rigour (quantitative phase)

The research rigour in the quantitative phase of the study was ensured through validity and reliability of the methods used for data collection and data analysis. Validity and reliability of the study refer to its trustworthiness and are both concerned with quality of research (Gerrish and Lacey 2006: 139).

#### 4.16.2.1 Validity

Validity is a crucial factor in the development, selection and application of an instrument. De Vos *et al.* (2011: 96) refer to validity as the degree to which the questionnaire or instrument measures the actual questions and the accuracy of questions. Terre Blanche, Durrheim and Painter (2008: 90) further explain that validity determines the extent to which the findings and conclusions of the study are sound. The validity of the research instrument means to measure

the truth or accuracy of scientific findings. In this study, the questionnaire was validated by face, content, construct and criterion validity. External validity refers to the extent to which results of a study can be generalised beyond the sample (Polit and Beck 2014: 378). The participants were sampled appropriately to accurately represent the total study population using purposive sampling in order for the results to be generalisable. Internal validity is about the conclusions made in the study accurately reflecting what is being studied and not other variables (Polit and Beck 2014: 381). The researcher conducted a pre-test on a neutral population with the same characteristics as the study population in order to assess the instrument and make amendments if necessary.

Face validity refers to a measuring instrument measuring what it is supposed to measure (Polit and Beck 2014: 379). Face validity was ensured through submission of the questionnaire to experts for evaluation. The statements in the questionnaire reflected all the concepts developed through the intensive literature study as well as the findings of the first phase of the study. Pre-testing of the data collection tools were conducted before research was conducted.

Content validity refers to how much a measure covers a range of meanings included within a concept (Polit and Beck 2014: 374). Adequate content coverage can be ensured through an extensive literature review. Content validity was ensured in this study by reviewing a wide range of relevant literature as outlined in Chapter 2 where each construct and its domains are clearly described. Data was collected from participants who were directly involved in quality implementation at the hospitals impacted by the NCS and the Batho Pele principles in order to ensure that the findings were unbiased.

Construct validity focuses on verifying the relationship between variables. This type of validity is concerned with whether or not the instrument is measuring the constructs. Construct validation is accomplished through analysing and conceptualising a construct or variable (Polit and Beck 2012: 339). Therefore,

the researcher developed the questionnaire by using the data that was obtained from the first phase of the study. The data collection tools were structured to obtain the required information and their development was based on the themes obtained from the qualitative phase of the study and the researcher ensured that the tools appeared professional and uncomplicated to complete. The researcher consulted with the supervisors who ensured that the variables and concepts under study were properly operationalised. The researcher also consulted with fellow nursing managers of other private groups and nursing experts in the field of quality management. Input from the statistician was sought to determine whether the construct validity was appropriate for statistical purposes.

#### 4.16.2.2 Reliability

Polit and Beck (2012: 452) describe reliability as the accuracy and consistency of information obtained by a study which is often associated with the methods used to measure the research variables. Reliability was ensured by inviting the nurse managers to render inputs into the data collection instruments, then conducting a pre-test at the hospitals.

### **4.17 ETHICAL CONSIDERATIONS**

Burns and Grove (2011: 228) highlight that nursing research not only requires expertise and diligence in the research process but also honesty and integrity, thus the importance of conducting research ethically. The researcher has the responsibility of ensuring that the research is conducted in an ethical manner. Protection of the rights of the participants is a significant factor to consider when planning the research. In South Africa, ethical issues relating to a proposed research are evaluated by an accredited research ethics committee, who are also responsible for granting permission to proceed with the study.

The researcher obtained full institutional ethics clearance before proceeding with the study (Appendix 1). Written approval was also obtained from the Chairperson of the Hospitals Ethics Committee (Appendices 3a and 3b) and the Hospital Manager and Chairperson of the Board of Directors (Appendices 2a and 2b) of the Hospital Group where the study took place.

During sampling the researcher sought the assistance of a statistician to guide the sampling and sample size for the quantitative part of the study (Appendix 8). This was done in order to ensure that a scientifically representative sample was obtained to allow generalisation of the study's findings throughout the four hospitals.

#### **4.17.1 Informed consent**

Burns and Grove (2011: 259-266) describe informing participants as being the transfer of information from the researcher to the possible participant and consent refers to the participant's agreement to participate in the study. Burns and Grove (2011: 206) state that the prospective participant should have sufficient understanding of the information given to them by the researcher and the researcher must also understand the type of information needed from the participant, as well as the fact that they have a right to refuse. Informed consent was obtained from all the participants after the researcher informed the participants of the purpose of the study (Appendices 4a and 4b). Participation was voluntary and anonymity and confidentiality was maintained throughout the study. Participants were informed that they could withdraw from the study at any time should they so wish. Although there were no unforeseen risks anticipated in this study, participants were informed that the interviews and survey could not be traced back to them. The participants were also informed that the data would be confidential, that the questionnaires and interview guides would not be used to identify individuals, and that all research data would be destroyed after two years. Following the full disclosure of information regarding the study, participants were asked to voluntarily sign a written consent form to participate in the study. The



researcher witnessed the signing and countersigned as witness. Documentation review was done by the researcher using a checklist after permission was obtained from the employer.

#### **4.17.2 Confidentiality and anonymity**

Confidentiality refers to the researcher's responsibility to protect the gathered information from being disclosed to any other person and anonymity refers to the protection of the identity of the contributors of this information (Burns and Grove 2011: 246). Confidentiality was maintained by keeping the consent form separate from the questionnaire so that it could not be used to identify the participants. The researcher ensured confidentiality by restricting access to the data. Electronic data were kept in a password protected computer and only the researcher and the supervisors had access to the data. The completed and returned questionnaires were kept in a safe drawer under lock and key in the researcher's office. No identifying information of participants were collected on the questionnaire. The right to autonomy and confidentiality was maintained in data handling to ensure that there was no untoward association of individuals with data. All interviews were conducted in privacy. The top sheet was linked to the interview sheet with the participant's number but only the researcher had access to this information which was kept under lock and key. The nature of the study had no potential to expose the participants to any physical harm. However, the researcher tried to constantly remain alert to any potential risk. All data collection sheets were transported from the research sites in sealed envelopes. The data sheets and audio tapes were stored in a locked cupboard and were removed only for the periods when the researcher needed to work on them. On completion of the study the sheets with participants' details will be destroyed by shredding them. All data are stored under lock and key and will be kept for a period of two years thereafter all paper based data will be destroyed by shredding and electronic data deleted.

#### **4.17.3 Beneficence and non-maleficence**

The principle of beneficence and non-maleficence obligates the researcher to act for the benefit of others and, therefore, the researcher has to ensure that no harm comes to the participants (Burns and Grove 2011: 233). Beneficence means maximising good outcomes for participants and minimising harm (Holloway and Wheeler 2010: 52). Non-maleficence means avoiding or minimising unnecessary harm or risk. This is related to beneficence and the balancing of risks towards the participant. The principle means doing good, acts of kindness or goodness, and avoiding harm. To adhere to this principle, the researcher needs to secure the well-being of the participants, be it physical, psychological, emotional, spiritual, economic, social or legal (Brink, van der Walt and van Rensburg 2012: 36). The nature of the study, its importance and how it was going to be conducted was explained to the key contacts and the potential participants. The information about the purpose of the study, the process of data collection and analysis and how the results would be disseminated was discussed with the participants. The participants were given an opportunity to ask questions about the research procedure and the purpose before giving consent to be part of the research study. The researcher ensured that interviews were conducted with maximum privacy. Participants were assured there was no harm in participating in this study and were allowed to withdraw at any time of the data collection period, with no penalty to themselves.

#### **4.17.4 Justice**

Justice in research refers to the right to fair selection and treatment of participants (Polit and Beck 2012: 155). Participants were selected based on the criteria enhancing the achievement of the research objectives, not as per researcher's personal preferences, and all participants had similar treatment (Brink, van der Walt and van Rensburg 2012: 36; Burns and Grove 2011: 233). Selection criteria for prospective participants were based on formal inclusion and exclusion criteria. Participation in the study was voluntary. All

participants were treated the same, were asked the same questions, and every participant's opinion was regarded as being of equal importance.

#### **4.17.5 Respect**

Respect refers to the participant's right to self-determination, which may be violated by deceiving participants, threatening them or giving them excessive reward to obtain compliance (Burns and Grove 2011: 233). Participants were informed of their right to choose to voluntarily participate in the study. Participants were treated with respect, during all the interaction of data collection. There were no benefits promised to participants as a result of participation in the study. The researcher returned to the participants with the final findings to do member checking in order to ensure the resultant report was an accurate reflection of their perceptions.

#### **4.18 SUMMARY OF THE CHAPTER**

A review of the methodology of the research was discussed in this chapter to ensure that a scientific study was conducted. Different steps of the research process and ethical considerations were discussed. The research results of the qualitative, quantitative and documentation review is presented in the next chapter.

## **CHAPTER 5: PRESENTATION OF RESULTS**

### **5.1 INTRODUCTION**

In Chapter 4, the research methodology was discussed. This chapter presents the findings of data analysis for both the qualitative and quantitative strands of the study. The qualitative and quantitative data sets aimed to achieve the first two objectives of the study which were to assess the nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections at participating eThekweni private hospitals, and to assess the evidence-based best practice standards and their outcomes in relation to the clinical domains of the NCS and the Batho Pele principles. The objective was to also identify how best practice standards contributed to the delivery of quality healthcare to patients and users of the service and based on the findings develop an audit tool for regulatory relicensing inspection for private hospitals in eThekweni district.

The following research questions had to be answered in an attempt to achieve these objectives:

- What are the perceptions of nursing staff regarding the current relicensing audit tool in relation to the clinical domains of the NCS and Batho Pele principles?
- What evidence-based best practice standards exists in selected private hospitals in eThekweni district and do they contribute to the delivery of quality health services for patients and users of the service?
- Can an audit tool for clinical relicensing inspections for private hospitals in eThekweni district be based on the NCS and Batho Pele principles?

This chapter presents only the results of the data from both the qualitative and quantitative strands. The mixing and merging of the two data sets will be discussed in the next chapter.

## 5.2 SAMPLE REALISATION

Four private hospitals in eThekweni district were included in the study. The hospitals were coded as hospitals A, B, C and D. These four hospitals are part of an established private hospital group managed by a Chairperson and Board of Directors and regulated by the Department of Health in eThekweni district.

In the ***Qualitative-First Phase***, a total of 24 participants were interviewed; nine from Hospital A, seven from Hospital B, five from Hospital C and three from Hospital D.

In the ***Quantitative-Second Phase***, a total of 234 participants were surveyed; 91 from Hospital A, 77 from Hospital B, 44 from Hospital C and 22 from Hospital D.

In the ***Documentation Review-Third Phase*** a total of 59 documents were reviewed from each hospital, amounting to 236 documents from the four hospitals for the entire study which was conducted over a period of 4 weeks.

The number of interviews conducted during the qualitative phase of the study at each hospital was guided by data saturation. A total of 24 interviews were conducted over a period of six weeks. The survey questionnaire used in the quantitative phase was a total of 234 respondents from the four hospitals and was conducted over a period of eight weeks. The questionnaire used was a seven point Likert scale. A total of 236 documents were reviewed over a four-week period.

## 5.3 PRESENTATION OF THE RESULTS

The presentation of the results for all three phases of the study is guided by the NCS and the Batho Pele principles. After presenting the participants' demographic data and the results of the findings in the qualitative phase of the study, the results of the quantitative phase of the study will be presented

followed by the documentation review and results. This section also presents the major themes and sub-themes with examples from the qualitative, quantitative and documentation review phases of the study data that described how the participants perceived the annual Department of Health relicensing inspections and how these related to the clinical domains of the NCS and the Batho Pele principles and met the objectives of the study.

## **5.4 PHASE 1 QUALITATIVE RESULTS**

### **5.4.1 Demographic data of the participants**

A total of 24 participants were interviewed; nine from Hospital A, seven from Hospital B, five from Hospital C and three from Hospital D. The people in the study were senior nursing staff of which 23 were females and one was a male nursing manager. Regarding the ages of the participants, six participants were between the ages of 30 and 40 years, nine were between the ages of 41 and 49 years of age and nine were 50 years and above in age. The experience levels measured the years of service in the nursing profession and ranged as follows: three participants had between 5-10 years of experience, eight between 11-20 years, seven between 21-30 years and six above 30 years. The designations of participants were four nursing services managers and 20 unit managers. The participants were selected across all specialisations so that a more meaningful understanding could be obtained of the experience of dealing with the current Department of Health relicensing inspections and to obtain recommendations in the development of a new tool. The demographic data of the interviewed participants is depicted in Table 5.1.

**Table 5.1: Demographic data of the interviewed participants**

Category	Characteristic	Frequency	Hosp A	Hosp B	Hosp C	Hosp D
<b>Age</b>	30-40	6	0	3	1	2
	41-49	9	5	1	2	1
	50 and above	9	4	3	2	0
<b>Gender</b>	Male	1	0	1	0	0
	Female	23	9	6	5	3
<b>Years of experience</b>	5-10 years	3	1	2	0	0
	11-20 years	8	2	2	1	3
	21-29 years	7	3	1	3	0
	30 years and above	6	3	2	1	0
<b>Position held</b>	Matron	4	0	2	2	0
	Unit Manager	20	9	5	3	3
<b>Specialty</b>						
General Med-Surgical		2	0	1	0	1
Operating Theatre		4	0	2	1	1
Medical ICU		3	0	1	1	1
Surgical Ward		1	1	0	0	0
Obstetrics and Gynaecology		3	1	1	1	0
Medical Ward		1	1	0	0	0
Administration		3	1	1	1	0
Infectious Ward		1	1	0	0	0
Surgical ICU		1	1	0	0	0
NICU		1	1	0	0	0
Psychiatry		1	1	0	0	0
Paediatrics		2	1	1	0	0
Trauma		1	0	0	1	0

### 5.4.2 Areas of specialisation in the qualitative phase

The researcher included participants across all specialisation in this study. The results of the study showed that two participants were from the general-medical and surgical wards, four from the operating theatre, three from medical intensive care unit, one from surgical ward, three from obstetrics and gynaecology, one from medical ward, three from administration, one from infectious ward, one from surgical intensive care unit, one from neonatal intensive care unit, one from psychiatry ward, two from paediatric ward and one from trauma unit. The areas of specialisation of the participants that were interviewed are illustrated in Figure 5.1.

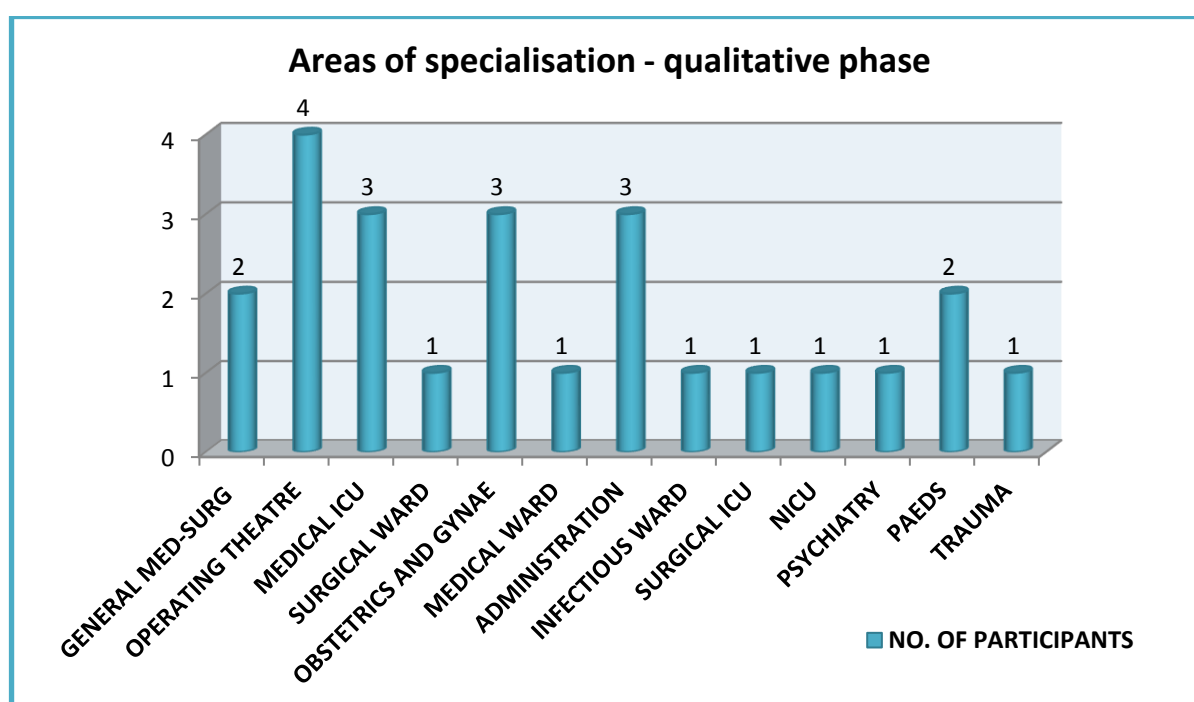


Figure 5.1: Areas of specialisation

## 5.5 MAJOR THEMES AND SUB-THEMES

The following three major themes emerged from the data during the analysis:

- Inadequate checking of the Patient Rights domain during relicensing inspection.
- Inadequate checking of the Patient Care domain during relicensing inspection



- Inadequate checking of the Clinical Support Services domain during relicensing inspection.

Table 5.2 illustrates the three major themes and sub-themes that emerged in relation to the research questions in the qualitative phase of the study.

**Table 5.2: Themes and sub-themes**

	<b>THEMES AND SUB-THEMES</b>
<b>Theme 1</b>	<b>Inadequate checking of the Patient Rights domain during relicensing inspection</b>
<b>Sub-theme 1.1</b>	Inconsistent checking of the Patient's Right domain during relicensing inspection.
<b>Sub-theme 1.2</b>	Lack of an audit tool for clinical audits during relicensing inspections.
<b>Sub-theme 1.3</b>	Recommendations for a standardised tool for clinical audits.
<b>Theme 2</b>	<b>Inadequate checking of the Patient Care domain during relicensing inspection</b>
<b>Sub-theme 2.1</b>	Inconsistent checking of evidence-based patient care practices during relicensing inspection.
<b>Sub-theme 2.2</b>	Inconsistent checking of clinical management during relicensing inspection.
<b>Sub-theme 2.3</b>	Inconsistent checking of aspects of clinical leadership during relicensing inspection.
<b>Sub-theme 2.4</b>	Inconsistent checking of clinical risk monitors during relicensing inspection.
<b>Sub-theme 2.5</b>	Inconsistent checking of adverse events and monitoring systems during relicensing inspection
<b>Sub-theme 2.6</b>	Inconsistent checking of infection prevention and control during relicensing inspection.
<b>Theme 3</b>	<b>Inadequate checking of the Clinical Support Services domain during relicensing inspection</b>
<b>Sub-theme 3.1</b>	Inconsistent checking of clinical support services during relicensing inspection.

In the presentation of the results, the themes and sub-themes are supported with verbatim statements from the participants in order to substantiate their relevance in the results. All nursing staff were interviewed in English as this is the spoken language at work. Excerpts of interviews that have been included in this chapter to support the themes are from the original transcripts of

interviews. The only alterations have been the inclusion of punctuations such as full stops, commas, question marks in order to make the participants quotes more understandable and logical. This approach was used by the researcher to present the participants descriptions completely while maintaining integrity of the data.

### **5.5.1 Major theme 1: Inadequate checking of the Patient Rights domain during relicensing inspection**

When participants were asked if the annual relicensing inspection included aspects of the Patient Rights domain during relicensing inspections, the majority of the participants expressed their unconscious prejudices toward the current relicensing process based on their interpretation of the NCS and Batho Pele principles as well as shared their own personal experiences as a yardstick for relicensing inspection regarding the Patient Rights domain. They overtly expressed their concerns regarding the lack of a checklist and a structured audit tool and recommended that a standardised audit tool be used for clinical relicensing inspections. The three sub-themes that emerged under this major theme during the interview were:

- Inconsistent checking of the Patient Rights domain during relicensing inspection.
- Lack of an audit tool for clinical audits during relicensing inspections.
- Recommendations for a standardised tool for clinical audits.

#### **5.5.1.1 Sub-theme 1.1: Inconsistent checking of the Patient Rights domain during relicensing inspection**

Participants agreed that some aspects of the Patient Rights domain are checked during the relicensing inspection although it is not performed in all departments consistently. During probing the participants were also asked if the clinical annual relicensing inspection by the auditors for private hospitals included aspects of respect and dignity as related to the Patient Rights domain. There were mixed responses to this question as participants

articulated their own viewpoints as per their perceptions and expressed the following sentiments regarding respect and dignity:

*“In some aspects ... yes it is checked ... in terms of respect and dignity they don’t interview patients in reception or the wards ... they do just an informal walkabout ... they don’t actually check this in detail ... They should also look at if the organisation has the Batho Pele principles, Patients Charter, Patient Rights, NCS displayed on the wall in passages. They don’t have set criteria to make sure the organisation has this ... Not sure if they look at the POPI act ... it is something that they should probably look at ... they should check if the hospitals have policies regarding the POPI Act”* (Participant 5, Hospital A).

*“In my opinion, the current audit does not support fully the NCS and Batho Pele principles ... I have been involved in many inspections ... the focus is mainly structural ... Although we are asked where we place our Patient Rights frames, NCS and Batho Pele principles ... audit should be focused more on clinical rather than structural ... but this is not the centre of focus”* (Participant 1, Hospital C).

The same sentiments were expressed by Participant 9, Hospital A who also recommended that an introduction by the inspectorate to the mothers to allay their anxiety was necessary. This was expressed in the following comments:

*“Basically, the audit is more structural and physical ... it’s to do more with regards to bed spacing ... rarely with conversation with patients. Firstly, when the auditors visit they must introduce themselves and tell the mothers why they are here ... to improve the service of patient care ... that’s so important”* (Participant 9, Hospital A).

Participant 3, Hospital C related the structural tool (R158) as being important because it is relevant to infection control but has very little to do with clinical audits and the Patient Rights domain. The following sentiments were expressed by this participant:

*“The audit is based on the R158 ... very little to do with clinical ... and infection control. More focused on bed spacing ... structure ... It is relevant to infection control. I agree it is interrelated but they do not look at respect and dignity”* (Participant 3, Hospital C).

Participant 5, Hospital C expressed her sentiment regarding this sub-domain in the example of checking the IV lines which in her opinion is not related to the R158 in the following comments:

*“No they don’t ... when they come to do the inspections they look at things ... I feel are not important ... like e.g. why is the IV line disconnected ... umm ... a patient is being taken to the bathroom ... he cannot push his drip stand to the bathroom so we disconnect the j loop which is a closed system ... umm ... this is for the patients’ comfort and I feel that taking a vacolitre into the bathroom is more a risk than disconnecting the cannula ... It’s not a requirement in the R158 ... everything here is structural. Besides there is no standard ... and it is disrespectful to the patient ... it does not meet the Batho Pele principles”* (Participant 5, Hospital C).

Participant 2, Hospital D expressed her emotions when patients are questioned about operational protocols in their presence in the following comment:

*“No ... I don’t agree ... during their walkabout they go to the patients and ask if they have valuables ... these are kept at the patient’s own risk ... they question the patients if they signed a form and were explained about this ... I feel it brings the nurses down ... questioning the patients in front of the nurses”* (Participant 2, Hospital D).

Participant 3, Hospital D expressed similar views to Participant 9, Hospital A, regarding introduction of the inspectorate team to the patients.

*“Err ... I would think that patients are not given their full respect ... they not always introducing themselves ... some ICU patients are orientated. They go through their health information. Patients should be told ... I know they have a right but patients also have rights and they must be respected”* (Participant 3, Hospital D).

Similar sentiments were expressed by Participant 4, Hospital C in the following comment:

*“With respect and dignity ... patients’ records are looked at to ensure we are maintaining confidentiality ... the location its kept ... err ... away from the public ... of course bed spacing ... ensuring all our patients are screened”* (Participant 4, Hospital C).

A few participants agreed that the clinical annual relicensing inspection included aspects of Respect and Dignity however did not elaborate further, as can be seen in the following comments:

*“Patients do not have much exposure to auditors in theatre ... but yes they check if patients are respected and treated with dignity”* (Participant 1, Hospital D).

*“When they come to do the inspections, they always check whether the Batho Pele principles are displayed and it’s easily accessible to staff ... that whether staff know about it ... the same with the patients’ rights. Yes ... it does add up to respect and dignity ... one has to show respect to the patient. Respect means to show that we believe in their cultural beliefs, their norms and values”* (Participant 2, Hospital A).

The participant went on to further explain what dignity means however did not indicate if this is checked during relicensing inspection:

*“Dignity is by identifying who they are and ensuring privacy ... addressing patients by their names and not by their bed numbers or doctor so and so patient and so forth ... speak softly”* (Participant 2, Hospital A).

During probing of the Information to Patients standard as related the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions and expressed the following sentiments regarding information to patients:

*“Once again I say no, the Department of Health does not provide a structure for the patient ... patients should be given full and accurate information in the language or media they used to ... openness and transparency is encouraged to enable the patient to understand the services provided”* (Participant 4, Hospital A).

*“The Department of Health did not look into that there ... how much the patients know, what the hospital provides to the patient ... I don’t think they have the criteria to look at this and the POPI Act ... they check if the patient’s files are safely locked away from the public”* (Participant 1, Hospital A).

*“No there is no contact with patients. Very minimal if any. No questions asked ... for example, about management of cerebral palsy patients ... it’s just structural ... they just walk through ... there is no structure ... maybe a tool will help ... done very informally”* (Participant 3, Hospital B).

*“When the Department of Health comes around they do not inform the patients they are doing audit checks ... have to inform the patients that there is an audit going on ... it is important to create awareness so that the*

*patients are informed who they are ... especially when they looking at bed spacing and structural issues” (Participant 3, Hospital A).*

During probing of Physical Access as related to the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions and expressed the following sentiments regarding physical access:

*“Physical access can mean a lot of things ... err ... they do look at bed spacing for one ... but the bed spacing criteria is not the same in every department ... they not very serious about this as well ... in some department they really check and some they don’t check well ... they must have set criteria for this ... they should have more manpower ... they also do not check for wheelchair friendly, for bathrooms and toilets ... err ... It could also mean locality of the hospital whether it is accessible and transport issues that patients have ... how safe patients are because of the locality ... safe transport and availability of transport” (Participant 5, Hospital A).*

*“Yes, they look at basins, hand wash, hand rub if accessible to staff and visitors” (Participant 4, Hospital C).*

During probing of Continuity of Care as related to the Patient Rights domain, participants mainly related this sub-domain to communication and how this ensures continuity of care between shifts and the team. Excerpts from participants in this regard include:

*“This is more about our handover we do verbally and also SBAR handover reports and care rounds ... But I am not sure of this” (Participant 1, Hospital A).*

*“They don’t check ... there are so many things that could be checked ... like the doctors’ round book, the progress notes, the hourly round book, the*

*SBAR report, the care round reviews, they don't ... they don't look at this ... maybe in some other wards but it is not like consistent ... every department is important ... should be checked as it is very important. They should also have set criteria for checking and ask all of this, to see if the quality of care is given to the patients. They have not checked a single note in my ward ... so maybe if they have a set of criteria ... they don't have to check all the notes ... they can for example check the progress notes, hourly round book ... so all will be related to patients and contribute to the Batho Pele principles"* (Participant 5, Hospital A).

During probing of Reducing Delays in Care as related to the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions and expressed the following sentiments regarding reducing delays in care:

*"Audits and checks must be done ... but I don't think auditors look at that ... I don't think that's actually done ... I have not heard or been told by my colleagues ... that this is done in inpatients"* (Participant 4, Hospital A).

*"Yes, this is checked in the ICU ... auditors ensure if it is 11h00 the patient assessment is complete"* (Participant 4, Hospital C).

*"This starts from reception ... not sure if they are looking at it ... waiting period in reception and outpatients ... we have many waiting times to measure, waiting period in trauma, waiting period in reception ... so there are areas you can look at, but they don't ... I don't think they look at trauma or the reception waiting period ... They can also spot check the wards if hang-times of antibiotics are done ... to reduce delays in care, also spot check how soon the patient is seen by the doctor on admission. Department of Health should have four to five people to check the various aspects ... each one checks various aspects ... They can also check various departments like x-rays to see their waiting times ... e.g. brain scans how long it takes to get this done in the private hospitals. This is*



*more about the medical aids ... ultrasound abdomen how long patient is starved ... if checked this can also reduce delays. It could also be the waiting period in theatre ... how long is patient fasted” (Participant 5, Hospital A).*

*“At the moment they look at waiting times in OPD ... they should also look at hang-times of antibiotics ... you know we have our own hang-times. Hang-times is relevant here I think” (Participant 1, Hospital A).*

During probing of Emergency Care as related to the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions and expressed the following sentiments regarding emergency care:

*“Err ... no ... This has not been picked up on ... emergency care ... there was nothing audited on emergency care. In the structural part ... auditors looked at the bed spacing in our cubicles ... for this year ... we were non-compliant with bed spacing ... in the spacing of our trauma cubicles ... err ... didn’t categorise on what level we are ... didn’t ask us for that in specific ... err ... it was more a structural ... it was more a structural audit nothing regarding the emergency care of the patient per se you know” (Participant 1, Hospital B).*

*“They look at this ... we have a register for mock drill ... they even go and question the staff ... did we do emergency mock drill on resuscitation and evacuation ... the roster is filled and sent to the nurse managers office and it is kept on file ... check emergency trolley expiry dates ... oxygen cylinder dates ... am (morning) and pm (evening) checks ... b.d. (twice daily) checks are done ... fridge temperature ... if the cold chain is monitored” (Participant 2, Hospital B).*

*“Crash cart and defibrillator is checked ... if it is serviced, oxygen supply and suction check ... if day to day checks are done, drugs checked for expiry dates, drugs appropriate for emergency ... does check if high alert medication is stored correctly. If medication cabinet has lock and key ... ambu bag, suction correct sizes, a working laryngoscope, person handling the emergency trolley must be a skilled staff. Basic life support training is done for staff every two years” (Participant 2, Hospital A).*

*“I have not been involved with Department of Health inspections here ... but in my previous job ... inspection team from 2009 ... there used to be three inspectors ... they also measured every theatre light on the bed. In the ICU's and the maternity delivery suite ... they used to pull out charts and look for items ... e.g. the Caesar theatre they look for the brightness in the room ... even in the delivery room ... We had a caesarean section theatre and auditors requested sample files to inspect from elective and emergency caesarean section files. They look at special criteria here for caesarean sections. Feedback is given to the hospital management” (Participant 6, Hospital B).*

*“The emergency trolleys are checked in a few wards ... but not like a constant thing ... in each ward. It should be checked even for a few minutes in every unit. Also, should be checking if the evacuation drills are done with mock drills ... they should be checking this ... not checked at all ... even the emergency trolleys not consistently ... I think only ICUs get checked” (Participant 5, Hospital A).*

*“Department of Health auditors ... check the emergency trolley and the defibrillator were checked on time that is within the first hour. We check our emergency equipment twice a day” (Participant 4, Hospital C).*

During probing of Access to Package of Services as related to the Batho Pele principles and the Patient Rights domain, the participants did not clearly understand this as a reference to R158. There were mixed responses to this

question as participants articulated their own viewpoints as per their perceptions and expressed the following sentiments regarding access to package of services:

*“Not sure what this is ... but auditors can check what services we provide. Never asked me this question” (Participant 1, Hospital A).*

*“No ... this is not checked. We have antenatal package ... I would like them to check during inspection to see if we are in keeping with KZN standards for maternity care ... to see if total antenatal care is done ... whether the booking process is in order and keeping in trends of other private hospitals. For example, ... book by 12 weeks. What are we doing to identify congenital abnormalities ... if this is as per Department of Health requirements? Breast examinations and also HIV counselling ... pain management in labour ward like epidural for control of pain” (Participant 2, Hospital A).*

*“No, they don’t check this ... they should be checking our service providers. Like x-ray ... the lab and other ancillary services ... should be looked at stringently” (Participant 4, Hospital B).*

During probing of Complaints Management as related to the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints and mainly expressed sentiments regarding their own hospital’s complaints management process. Excerpts from participants include:

*“At the moment the PLO (Patient Liaison officer) goes to the wards ... we have a PAQ (Patient Administered Questionnaire) system and a JD55 (Pen carbon book A4) incident reporting system ... no they have not checked up on this” (Participant 1, Hospital A).*

*“I am not sure if they ask about our JD's incident reporting ... but this is not looked at ward level ... they don't look at JD55 at ward level ... they may be asking some wards ... but not my unit ... they don't ask how we report our complaints ... how we do our case reviews or follow-ups ... nothing of that sort ... at all ... it is very important to ask how the organisation sorts its complaints” (Participant 5, Hospital A).*

*“Okay ... did look at my QMS (Quality Management Systems) report on a monthly basis ... looked at the amount of P1, P2, and P3 (Priority levels) complaints which we categorise ... P3 is the normal complaints which we see on a day to day basis which we can squash out whilst the patient is still admitted in our hospital ... we can try and resolve the problem amicably with our patient before the patient gets discharged ... P2 is when the patient gets discharged and it comes to us via a formal e-mail from the patient, the customer or via ... err ... hello peter via ... err ... via face book, or any social medial ... err ... which has negative repercussions if not sorted out amicably ... that ... did look at but didn't go on ... in too much in-depth with it? ... P1 ... has a legal implication ... obviously there are lawyers involved ... litigation involved. This could have serious detriment to the hospital if not handled professionally. This is part of the in-house complaints management procedure which we do” (Participant 1, Hospital B).*

*“No ... It's not looked at ... whatever you asking is so essential ... I would rather they do these aspects of quality rather than structure ... if you do this nursing care will improve and patients will get quality care ... these are very essential ... we will get to know our short comings” (Participant 2, Hospital C).*

*“Patients have a right to complain ... the auditors do not question us on this. We have a PAQ tool internally. We count in our wards ... compliments and complaints monthly ... complaints according to P1, P2, and P3.*

*Department of Health does not have these tools ... it's not assessed by the auditors"* (Participant 3, Hospital B).

*"We have our internal complaints system. But it has not been checked ... I think they should have a structure and an audit tool for us to follow ... they must think of having an audit tool for all this ... We do have policies for patient care and for the mothers an educational file but it is not looked at"* (Participant 7, Hospital B).

*"They did look at this but I feel it could have been done in depth with our clinical complaints ... whatever questions open or closed ... just look at our system"* (Participant 1 Hospital C).

#### 5.5.1.2 Sub-theme 1.2: Lack of an audit tool for clinical audits during relicensing inspections

Participants expressed their views throughout the interview on not having a clinical audit tool or structure for clinical audits during relicensing inspections. Many of the participants voiced their opinions about the current relicensing inspections not being audited against a set of criteria or benchmarks. Excerpts from participants include:

*"No, it's not checked ... when Department of Health comes there is no audit tool ... In my opinion there is no audit tool or structure for audits ... there was no tool for respect and dignity. There was no tool for what was being looked at"* (Participant 7, Hospital B).

*"Honestly, Department of Health inspections are very generic inspections ... they should firstly have an audit tool to give us guidance. There is no checklists as well ... not done completely with regards to ... respect and dignity ... this is not being checked. It would be nice to have a tool ... benchmarking will really work well for each hospital"* (Participant 3, Hospital B).

*“Err ... no ... I would say no ... there is no standard tool ... first of all Department of Health ... does not provide us with a standard tool, more focused on structure than on patient care ... more concerned about bed spacing and structure ... more focused on the number of bed capacity ... if we exceeding the beds ... stipulated ... err ... rarely look at patient progress notes or admission notes” (Participant 4, Hospital A).*

*“I don’t think they have criteria to look at this ... I don’t think that they look at physical access or wheelchair access” (Participant 1, Hospital A).*

*“Presently during my experience for relicensing I have not seen this being done by the Department of Health. There is no audit tool regarding these aspects you have listed ... mentioned ... I think it is very important for trend analysis for your clinical risks year to date and also bench-marking from ... err ... for example 2015 ... what your incident rates were for your clinical ...and also what action plans have been put in place for the current year ... and has it been effective ... and what have you done as a supportive measure to your unit managers and to your staff from a continuing education ... to try and mitigate these risks ... and see what you have done ... and also see if there has been any legal implications following this clinical risks ... and what has the hospital done to curb these risks from further occurring” (Participant 1, Hospital B).*

*“Yes, we address our patients by their names and not by their diagnosis ... patients are screened before the procedure and their consents are checked. But this is not looked at by the Department of Health ... they do not have a tool to check ... it’s more structural” (Participant 5, Hospital B).*

*“Err ... another example is the blinds ... when we commissioned two years ago it was fine to have blinds ... in the 3rd visit it’s not okay to have blinds ... we must have curtains ... curtains are more a risk ... and changing the standards without the reasons is not consistent ... there is no tool to say*

*this is what must be done and to correct us with the right reasons for the changes” (Participant 5, Hospital C).*

#### 5.5.1.3 Sub-theme 1.3: Recommendations for a standardised tool for clinical audits

Some of the participants recommended a standardised clinical audit tool with criteria as a guide to audit planning for relicensing inspections. Excerpts from participants include:

*“Remember we want to partner with ... public private partnerships ... we want to see how we can best work together to derive the most effective healthcare to our patients and best do those things you know ... and I think if we manage our clinical risks and adverse events and if we have proper evidence base practices ... you know in place ... err ... each hospital will really do well. I think if they have an audit tool regarding that ... benchmarking ... it will really work well for each hospital” (Participant 1, Hospital B).*

*“Patient questionnaire and feedback are done at ward level ... done timeously after patient is discharged ... Feedback has to be given before discharge. Now we have feedback given by Discovery – complimentary or complaints directly to medical aids and we deal with these complaints monthly ... we can develop and implement a tool ... instead of being audited on different things chop and change, so that we can stick to one standard tool. Instead of being audited on different things all the time” (Participant 3, Hospital A).*

*“To some extent it is checked ... they go to patients and checks drips ... I feel in five minutes... you cannot just get a complete picture of patient care ... Hazardous Biological Agents risks are not checked. Maybe a standardised tool will help ... it will tell us what is expected ... will assist us in what to do” (Participant 5, Hospital C).*

### **5.5.2 Major theme 2: Inadequate checking of the Patient Care domain during relicensing inspection**

The participants agreed that certain aspects of the patient care domain were checked; however, they could not relate this to the current R158 audit tool. Participants were also familiar with evidence-based best practice standards and verbalised elements which were used within their organisation to prevent unintended harm to healthcare users and patients. These included healthcare-associated infections, and policies and procedures to optimise patient care. Participants verbalised agreement with using evidence-based bundle practices and felt confident in using them, because these practices provided guidelines for nursing practice and contributed to quality and patient safety in their organisations. Participants also verbalised that they follow key benchmarks to meet targets on a monthly basis. They submit monthly reports to their nurse managers and run monthly meetings to discuss clinical governance issues. The six sub-themes that emerged under this major theme during the interview were:

- Inconsistent checking of evidence-based patient care practices during relicensing inspection.
- Inconsistent checking of clinical management during relicensing inspection.
- Inconsistent checking of aspects of clinical leadership during relicensing inspection.
- Inconsistent checking of clinical risk indicators during relicensing inspection.
- Inconsistent checking of adverse events and monitoring systems during relicensing inspection.
- Inconsistent checking of infection prevention and control during relicensing inspection.



#### 5.5.2.1 Sub-theme 2.1: Inconsistent checking of evidence-based patient care practices during relicensing inspection

There were mixed responses to this question. Many participants expressed sentiments regarding their own evidence-based practices. Excerpts from participants include:

*“This is not being looked at in detail. I haven’t seen them use a tool ... just verbally ... they look at staffing ratios for every patient ... we have evidence-based best practice like ... infection control as per KZN regulation for antibiotic prophylaxis and stewardship ... Surgical Care Improvement Project (SCIP) bundle practice, catheter bundles, antibiotic hang-times, steps taken to prevent SSIs and UTIs, use of single rooms for isolation ... they did not check how we treat patients with chickenpox in labour ... the use of ID bands or breast-feeding .... nursing policies, standing orders ... IV cannulation, BCG and epidural protocols are not looked at ... Special policies like management of obstetric emergency are not looked at”* (Participant 2, Hospital A).

However, the same participant agreed that the following is looked at and relates to this sub-domain:

*“Mock drills for basic life support, fire evacuation drills, health and safety inspections, disposal of placenta, health and safety policy are looked at ... destruction certificates are looked at”* (Participant 2, Hospital A).

Participant 4, Hospital A responded positively and expressed the following sentiment:

*“Check if drips are labelled ... postoperative observations are done ... intake and output is recorded ... they ask the patients if the side-effects of medication are explained ... check documentation if post-operative observations are recorded”* (Participant 4, Hospital A).

Participant 1, Hospital A shared similar sentiments:

*“They also look at SHEQ (Safety, Health, Environment and Quality) files, ward protocols, staff development, infection control ... call bells if working and equipment failure”* (Participant 1, Hospital A).

Participant 5, Hospital A expressed a different opinion of the relicensing inspection:

*“In patient care they see mainly the safety file ... for the entire hospital ... but do not look at this on the wards ... for example the risk base files, risk assessments per high-risk ward ... for example the infectious ward, paediatric ward ... they should be looking at this in detail to ensure we meeting requirements regarding safety ... yes we have policies ... but they don’t look at it ... they are not consistent in their checking ... not in every ward ... in my ward they only did the bed spacing”* (Participant 5, Hospital A).

Participant 7, Hospital A shared similar sentiments:

*“Um ... in my personal opinion the only thing that’s covered with patient care by the auditors was ... um ... more focused on the environmental ... and when it comes to the patients’ safety ... the bed spacing ... the patient safety aspect of it ... but not so much when it came to associated infections and support of any patients or staff. They didn’t have a tool specifically for management of these issues ... so far when it comes to our hospital or group we doing everything according to the patient rights and the Batho Pele principle ... there’s no audit tool for patient care with the Department of Health”* (Participant 7, Hospital A).

Participant 1, Hospital B, expressed the following sentiments regarding the patient care sub-domain:

*“Okay I do know they look at identification of patient. They look at the bed spacing of patient beds ... bed to bed ... They look at obviously your infectious patients if they are being nursed in isolation and what kind of infections are we managing at hospital level, hospital specific ... They look at health education being given to our mothers for their children and for continuity of care. They want to reduce the amount of admission for children that are coming back for readmissions to the hospital because obviously of super infection ... nosocomial infection. I know they did look at that and ... err ... in the surgical patient ...the amount of entries done ... if it was a minor operation or a major operation ... vital signs ... how often was vital signs being done and whether it was being done post-operatively ... and whether it was done consistently ... and if there was any gaps and also ... err ... the pain, they were looking at the pain management ... post-operative pain and if analgesia was ordered six hourly ... and if it was given strictly six hourly and not given prn (whenever necessary) and if it was annotated in the medication chart ... if the patient refused”* (Participant 1, Hospital B).

#### 5.5.2.2 Sub-theme 2.2: Inconsistent checking of clinical management during relicensing inspection

There were mixed responses to this question as participants mainly expressed sentiments regarding their own evidence-based practices and assessment processes. Excerpts from participants supporting this statement include:

*“They should be checking what our falls and injury rate is ... we use Morse falls risks assessment ... Waterloo for pressure sores, phlebitis score for drip infiltrations. Our CPD teachings for our staff ... our statistics are reduced now because of the risk tools and in-service ... we using”* (Participant 5, Hospital A).

When Participant 1, Hospital A was asked what policies are being looked at by the Department of Health during relicensing inspection at unit level the response was:

*“I don’t think they do ... maybe at your level they do ... I know that at ward level they don’t check ... but they do look at our risk base file, for monthly risks and control measures ... also check our education file to see if they sign”* (Participant 1, Hospital A).

At Hospital B, Participant 1 expressed the following opinion:

*“Uh ... well during my experience with the Department of Health relicensing I haven’t seen any audit tool regarding clinical management of improved health outcomes ... hasn’t picked on that ... uh ... they have been through my files all my QMS files ... and seen what my trend analysis for ... my sepsis report, my best care bundles but, err ... has really not audited it as such you know”* (Participant 1, Hospital B).

Similar opinions were expressed by Participants 7, Hospital B and Participant 1 Hospital D:

*“No this is not checked ... not with SCIP, BCA (Best Care Always), hang-times ... Department of Health should use this information as a structure, AMS (Antimicrobial Stewardship) programme is not being looked at ... we are doing all this on a daily basis”* (Participant 7, Hospital B).

*“We look at time-outs ... Best care always ... everything is done to ensure safety and quality. We look at this monthly and report ... Evidence-based practices like SCIP bundle ... time-out ... having the right patient for the right operation on the right site ... antibiotic stewardship ... we are doing all this but they never ask about this ... which they should”* (Participant 1, Hospital D).

#### 5.5.2.3 Sub-theme 2.3: Inconsistent checking of aspects of clinical leadership during relicensing inspection

Many participants were not familiar with the intent of this question. With probing the following responses from participants were articulated:

*“Does not look at this in detail ... but they do check clinical risks”*  
(Participant 1, Hospital A).

*“Nothing is checked here except the rolcall book ... she did ask how many professional nurses I have”* (Participant 9, Hospital A).

When asked if the Department of Health informed the participant how many professional nurses are required, the same participant responded as follows:

*“No ... there is no audit tool with staffing ratio ... This is very important for paediatric ward ... only bed spacing is checked ... they come and check bed spacing quick round in and out”* (Participant 9, Hospital A).

When asked if there is a staffing ratio from the Department of Health the response from Participant 1, Hospital B was expressed as follows:

*“No ... hasn't specifically mentioned this ... there was no documentation regarding it but ... did speak to me verbally regarding the amount of staffing ... per ICU per high care patients ... If it is a ventilated patient its must be strictly one is to one ... and if it is a high care patient on inotropes the patient must be nursed by a registered and not an enrolled nurse. ... also in NICU – high care baby that's in NICU must be nursed by an enrolled nurse ... that's has gone through an accredited institution who have trained her for high care of neonates, other than that they not allowed to nurse these babies. Also if it's a RN working in NICU she should preferably have midwifery, so those were the recommendations posed to me going forward when I am employing my staff ... for ICUs ... err ... want*

*more RNs in ICU as opposed to enrolled nurses and considering the amount ... huge shortage of RNs in South Africa and mass exodus ... it really poses a burden on me as a nursing manager to try to recruit and retain this scarce resource” (Participant 1, Hospital B).*

Participant 1, Hospital D was the only participant who expressed sentiments about a job description in the following statement:

*“Yes ... I think they look at it ... staff files, induction and orientation programmes and JDs (Job Descriptions)” (Participant 1, Hospital D).*

Participant 6, Hospital B expressed sentiments about a leadership course in the following statement:

*“I don’t know about this ... but they had looked at our program we had for team leaders course ... all team leaders should have clinical background for their job” (Participant 6, Hospital B).*

#### 5.5.2.4 Sub-theme 2.4: Inconsistent checking of clinical risk monitors during relicensing inspection

Participants agreed that many of these processes are in place internally but rarely checked during relicensing inspections. Excerpts from participants include:

*“I know that at ward level they don’t check clinical risks ... they should ... like if you have three CLABSI (Central line arterial blood stream infections) they should check ... what we doing about it” (Participant 1, Hospital A).*

However, the same participant verbalised the following as well:

*“They do check the following ... emergency equipment checks, fridge temperatures, allocation of staff, drug registers for signatures and*

*movement of the drug in the drug book from one page to the next and stock levels are checked” (Participant 1, Hospital A).*

*“Err...did not ask me what my SSI is ... my risks ... or do a discussion with me ... regarding my risks ... they do not focus on clinical risks at all” (Participant 2, Hospital C).*

*“This must be looked at ... at ward level ... slips and falls, medication errors, prevention of pressure sores ... they must also look at birth register for mode of delivery, reason for episiotomy, reason for caesarian section” (Participant 2, Hospital A).*

*“No, they don’t look at clinical risks ... but we do risk assessments and clinical reports ... and adverse events, these are regarded as sentinel events ... case review have to be done and the proper actions have to be taken” (Participant 3, Hospital A).*

*“The following is not done ... focus is on sepsis reports ... checking to see if standards and measurements are in place to prevent patients from adverse events ... like patient falls ... checking on protocols ... like needle stick injuries ... discussing strategies for improved quality care ... Department of Health should check maternal deaths, theatre related deaths” (Participant 4, Hospital A).*

*“I must be honest during relicensing phase ... didn’t look at clinical risks, there was no audit tool regarding clinical risks ... obviously I manage my processes internally ... I track and trend what my clinical risks are and my basic clinical risks are my medication errors ... my slips and falls, pressure ulcers, documentation errors those are my top four incidences that I do manage and track and trend them on a monthly basis and provide that information to my unit managers ... didn’t look at that ... didn’t look at the clinical risks at all” (Participant 1, Hospital B).*

*“We have best practices ... catheter bundles ... this is not checked ... our antibiotic stewardship that we have in place ... falls risk assessment ... pressure care. They should check if this is carried out in the units ... tools are in place ... these are definitely related to the Batho Pele Principles they should be checking to see if it is done. Infection control ... cases should be checked. They should be asking if we are using the right personal protective equipment ... check if the nurses know what is happening. Patient Identification ... if we identifying patients correctly ... we should have tools to audit and assess medication errors ... How are we checking patient identification ... need to draw up a tool”* (Participant 3, Hospital B).

#### 5.5.2.5 Sub-theme 2.5: Inconsistent checking of adverse events and monitoring systems during relicensing inspection

All participants agreed that this is an important aspect of clinical audit and should be closely monitored during relicensing inspections as noted on the excerpts below:

*“They should be looking at maternal death which is very important ... Patient fall which subsequently led to a patient demising ... or any patient adverse events in the hospital which ... led to post-operative sentinel event such as postoperative patient demising on the table ... they should be looking at anaesthetic death ... they should be looking at child mortality”* (Participant 1, Hospital B).

*“They don’t look at this ... not sure if they look at it somewhere else ... they should be looking at falls injury...whether we have any litigation at the moment ... pending case review how many?... What is it about? What are our high risks ... there is a lot that they don’t look at”* (Participant 5, Hospital A).



*“No ... this is not looked at ... but we have our protocols for incidents case reviews ... and continuous education ... we follow the Adverse Events Policy” (Participant 1, Hospital D).*

#### 5.5.2.6 Sub-theme 2.6: Inconsistent checking of infection prevention and control during relicensing inspection

Participants agreed that many of these processes are in place internally but rarely checked during relicensing clinical audits. Excerpts from participants include:

*“This is not being looked at in detail ... we look at it ... but I haven’t seen them use a tool here ... just verbally ... and every patient has evidence-based bundle practice for like ... infection control ... as per the KZN regulations for antibiotic prophylaxis and stewardship, SCIP bundle practice, catheter bundle practice, antibiotic hang-times, steps are taken to prevent SSIs ... use of single rooms for isolation ... they did not check how we treat our patients with chickenpox in labour ward” (Participant 2, Hospital A).*

*“Err ... no ... I don’t think they really look at any of these aspects ... in terms of patients nothing ... all done in terms of structure ... they check sterile and semi-restricted area ... flow from CSSD ... but I have processes in place for checking of my staff attire, maintaining the sterile from the unsterile areas ... I have checklists and cleaning programmes ... In terms of my patients I use sterile items ... we do time-out and SCIP bundle practice ... chlorhexidine prewash ... cleaning skin and drying times ... antibiotics given 1 hour before surgery ... we are not questioned about this ... no” (Participant 2, Hospital C).*

One of the research sites in the study has a dedicated TB infectious unit. When asked to relate this sub-domain to the current relicensing audit the responses were as follows:

*“My ward is an infectious unit ... the only thing they checked was the dispensers ... They should check the sputum room, policies, smoke tests done ... check our isolation wards for negative pressure, check the hygrometers on the wall ... my infectious policies ... should question about MDR (Multiple Drug Resistance) patients curtain washing plan ... how we soak our dishes ... how we isolate our patients, our PPE's and our staff medicals. There was not a single question regarding infection control”* (Participant 5, Hospital A).

*“Only thing looked at ... is the cleanliness of the ward, sluice room, kitchen, D germ bottles and expiry date ... also when the patient has a drip it is not disconnected and lying on the floor ... if it is disconnected ... we are asked why is it disconnected ... they don't look at our files ... or our protocols ... check if IV line is labelled and lines changed within 72 hours ... does not look at antibiotic stewardship ... we give antibiotics for 5-7 days”* (Participant 2, Hospital D).

*“I haven't seen that ... I am not going to lie, yes ... we have sepsis reports, tracking and trending, SCIP Bundles, antibiotic stewardship for prevention of SSI ... giving antibiotics before the operation ... clipping instead of shaving. Alcohol solutions of iodine or chlorhexidine to cleanse the skin prior to operative procedure ... Looking at UTI's ... to prevent catheter associated infections ... maintaining a closed drainage system ... following proper technique for catheterisation ... hand washing and gloving”* (Participant 4, Hospital A).

Participant 3, Hospital B and Participant 1, Hospital C provided mixed reviews for this question. Excerpts from these participants are as follows:

*“Yes, they look at this at unit level ... they look at negative pressure. Not all isolation rooms are checked ... They should have an audit tool ... based on the tool they should check PTB's (Pulmonary Tuberculosis) ... if screened*

*... isolated and management of MDR and XDR (Extreme Drug Resistance) patients” (Participant 3, Hospital B).*

*“Okay ... infection yes ... although I don’t agree with some of their reasoning behind some of their infection control expectations ... they have for example ... when they speak of blinds as opposed to curtains ... I feel there should be a proper standard with proper reasoning and expectations ... blinds are not allowed in the passage ways as opposed to curtains ... like why curtains is a better choice ... must be in the corridor as opposed to blinds ... something that just popped up recently, no standard ... no guidelines ... not even in the R158. This just popped up” (Participant 1, Hospital C).*

### **5.5.3 Major theme 3: Inadequate checking of the Clinical Support Services domain during relicensing inspection**

Participants agreed that only a few support services are audited during relicensing inspections and expressed their concerns regarding those not audited. They further acknowledged that clinical support services are key to providing quality and patient safety care to their patients. One sub-theme emerged under this major theme.

#### **5.5.3.1 Sub-theme 3.1: Inconsistent checking of Clinical Support Services during relicensing inspection**

Most participants agreed that some aspects of the pharmacy services are audited during relicensing inspections. When participants were probed regarding Pharmaceutical Services, many participants were unsure if all the standards in the pharmacy or their units are audited against the set criteria. Excerpts from participants include:

*“No this is not checked at unit level ... should check pharmacy waiting times, check for expired drugs ... Narcotic drug checks if done every three*

*months. Department of Health to check if pharmacy policies are compliant” (Participant 1, Hospital A).*

*“They do visit the pharmacy ... but I am not completely sure ... there I think they should see how they meet regulation ... should look at expiry date of drugs ... should look at transportation of drugs. Should also look at how we dispose of expired drugs ... they should also look at the qualification of people working in the pharmacy” (Participant 5, Hospital A).*

*“Yes, pharmacy has been audited. In pharmacy they looked at the pharmacy charter and patients’ rights ... it must be visibly displayed so it was visibly displayed. And they also looked at the actual layout of the pharmacy. They looked at the sterile area for mixing of your medication and whether it was compliant ... And they looked at your hand wash basins, and whether they were compliant. Also, if your pharmaceutical items if they were correctly stored and packed ... they cannot be on the floor ... they looked at that. Your shelving they looked at ... And they also looked at the staff lounge if the staff had a lounge to sit and if there were the necessary items in the staff lounge” (Participant 1 Hospital B).*

*“I haven’t actually seen them audit expired and disposal of pharmacy drugs. The cold chain aspect not sure it is checked at every given time when they do their audits” (Participant 3, Hospital A).*

*Pharmacy we are doing this at ward level ... there is a file in place for red antibiotic prescription charts so that the antibiotics are delivered and TTOs within 30 minutes (Participant 2, Hospital D).*

Regarding Diagnostic Services participants agreed that this is an important component of quality and patient safety but is not audited during relicensing inspections. Excerpts from participants here included:

*“No ... but I think they should” (Participant 1, Hospital A).*

*“Diagnostic Services ... no ... I have not seen this. They don’t check and audit blood gas machines and critical equipment checks are not audited”*  
(Participant 3, Hospital A).

*“Well I must be honest ... not even touched on it ... But we should be looking at our dosimeters, our staff exposure to radiation definitely ... especially in our high-risk areas like your ICUs and your theatres which is very important, even trauma where lot of radiation is taking place and obviously we don’t want to expose our staff and it is not even touched on. I must be honest there is no audit tool also which is very important for our staff and our staff welfare. And this was not picked up by the Department of Health and neither was it picked up on how much of radiation equipment we have”* (Participant 1, Hospital B).

Regarding Therapeutic and Support Services, participants agreed that this is an important component of quality and patient safety but is not audited during relicensing inspections. Excerpts from participants include:

*“I think the BHC services are being checked but I am not sure about that”*  
(Participant 1, Hospital A).

*“Therapeutics support ... we have BHC (Behavioural Healthcare) ... I think they walkabout ... not sure. We do have a physiotherapy unit but I am not sure if this is checked ... We send one or two patients from my unit. Not sure whether they ask for records ... the MDR policy is that the patient must have been seen by a psychologist before the treatment starts ... they don’t ask for anything”* (Participant 5, Hospital A).

*“Therapeutic and support – I would say not checked in depth. They should check cleanliness of the ward ... especially the sluice room how we dispose of paper diapers ... check our policy and procedure ... they should check hand washing and spraying in-between ... observe nurses spraying*

*their hands in-between babies as children are high risk” (Participant 9, Hospital A).*

*“Therapeutic and Support ... our ... err ... no checks are being done on rehab and BHC programme. They don’t check on even our employee assistance or referrals by HR (Human Resource), if staff has drug dependency. Department of Health does not check this ... Although psychiatry ward is supposed to be audited, patients go to BHC. They don’t go there to do an audit” (Participant 3, Hospital A).*

Regarding Health Technology Services, participants agreed that this is an important component of quality and patient safety but is not audited during relicensing inspections. Excerpts from participants include:

*“Health technology ... They don’t even ask about our laboratory services ... how many we have ... they should check the efficiency ... how soon the blood results arrive ... the way in which it is managed. Telephonic results ... Then comes the normal results ... they should check the many good services we have in this hospital. Check and make comparisons ... with results of other hospitals” (Participant 5, Hospital A).*

*“Health technology services ... err ... this is not looked at ... I think it is important for them to look at critical asset file especially in paediatric ward ... Check expiry dates for ... and service dates for equipment” (Participant 9, Hospital A).*

*“Yes, they did check my ventilators, they checked my last service date on my ventilator uh. They even checked my certification of services ... my yearly certification of services whether they done and concurrent and then I had to submit a critical care register to annotate the next service date” (Participant 7, Hospital A).*

Regarding Sterilisation Services, participants agreed that this is an important component of quality and patient safety but is not audited during relicensing inspections. Excerpts from participants include:

*“Sterilisation ... is important in paediatric ward. Some boarder mothers do formula feeding. The sterilisation process in the milk kitchen should be checked ... Immunisation Records Road to Health Card ... Nursing staff should be questioned”* (Participant 9 Hospital A).

*“Yes, they did go to our CSSD. Looked at our processes there ... went into theatre audited our clean and dirty corridors ... looked at the clinical hand wash basins ... didn’t look at our processes regarding the sterilisation of our equipment in theatre ... didn’t looked at that. There is no audit tool regarding that also, so it wasn’t really picked up on. There was nothing in depth done about it. It was just a walk, walk through you know, like just like a general walk”* (Participant 1, Hospital B).

Regarding Mortuary Services, participants agreed that this is an important component of quality and patient safety but is not audited during relicensing inspections. Excerpts from participants include:

*“Mortuary Services ... we do not have a mortuary service on site ... but we use preference of the family for the choice”* (Participant 3, Hospital A).

*“Mortuary ... they do ask how we send our ... we have our own agreement with ... and they keep for 24 hours with relative’s choice”* (Participant 2, Hospital B.)

Regarding Efficiency Management, participants agreed that this is an important component of quality and patient safety but is not audited during relicensing inspections. Excerpts from participants include:

*“Feedback is from patient administered questionnaires, clinical incidences and doctor complaints and through our patient numbers year-to-date and business efficiency reports” (Participant 1, Hospital A).*

*“Efficiency management ... also not asked for. However, I have my business efficiency file ... if there are any complaints it is addressed with the customer and the nursing staff ... I have a monthly risk base file with assessment and feedback to staff ... should come in with a unit specific audit tool for this ... tell us what is wrong to improve to render quality patient services” (Participant 9, Hospital A).*

*“Efficiency Management ... we do have a clinical incident register which is kept at ward level ... In-service we do ... Monthly risk register is implemented by all the units but this is not assessed by the auditors” (Participant 3, Hospital A).*

*“Efficiency management ... no this is not checked ... no ... Allied services are important, like cleaning should be checked but they don’t ... I think all audits should be like this structured ... we should be asked on this rather than structure to ensure that we meet the Batho Pele principles, respect and dignity” (Participant 2, Hospital C).*

*“Efficiency management is not looked at ... I recommend to focus on ... for example blood transfusion. My opinion is that the focus is more on paperwork, charts ... not on services” (Participant 3, Hospital D).*

*“The auditors did look at our waiting times in trauma ... that was the only thing I must be honest. The only single item looked at, but not holistically, no” (Participant 1, Hospital B).*



When asked for recommendations for this sub-domain, the following sentiments were articulated by the same participant:

*“I think we have covered a lot on patient care and infection control which is very pertinent to us especially in KZN with our high infection rates and with our high level of immune compromised patients ... it’s important to look at those with tracking and trending ... and looking at what action plans we can have in place at each hospital level ... to at least standardise our processes at each hospital level”* (Participant 1, Hospital B).

## **5.6 PHASE 2: QUANTITATIVE RESULTS**

The data from the quantitative analysis were captured and subsequently analysed using version 23.0 of the SPSS. Data from the quantitative data set were analysed in two forms. The first analysis included a composite analysis of the entire data set to assess how the four hospitals as a whole performed in relation to the first two objectives of the study, broadly understood by participants as assessment by the auditors and the existence of evidence-based best practice standards in their hospitals. Secondly comparisons were made between the four hospitals. The following tests were used in the analysis of the quantitative data:

- Descriptive statistics including means and standard deviations, where applicable frequencies are represented in tables or graphs.
- Chi-square goodness-of-fit-test: A univariate test was used on a categorical variable to test whether any of the response options were selected significantly more/less often than that of the others.
- Under the null hypothesis, it is assumed that all responses are equally selected.
- Regression analysis: Linear regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable.
- Kruskal Wallis Test: Non-parametric equivalent to ANOVA.

- A test for several independent samples that compares two or more groups of cases in one variable.
- Mann Whitney U Test: Non-parametric equivalent to the independent samples t-test.
- One sample t-test: Tests whether a mean score is significantly different from a scalar value.

The level of significance was set at  $p < .0005$ .

### 5.6.1 Section A: Demographic data of the participants

#### 5.6.1.1 The number of participants per hospital in the study

The number of participants in the quantitative phase was from four hospitals coded as Hospital A, B, C and D (Figure 5.2). A total of 270 questionnaires were distributed. The total number of questionnaires that were received and included in the data analysis and interpretation was a total of 234 from all four hospitals. The results of the study showed that 38.9% ( $n=91$ ) were from Hospital A, 32.9% ( $n=77$ ) were from Hospital B, 18.8% ( $n=44$ ) were from Hospital C and 9.4% ( $n=22$ ) were from Hospital D as illustrated in Figure 5.2.

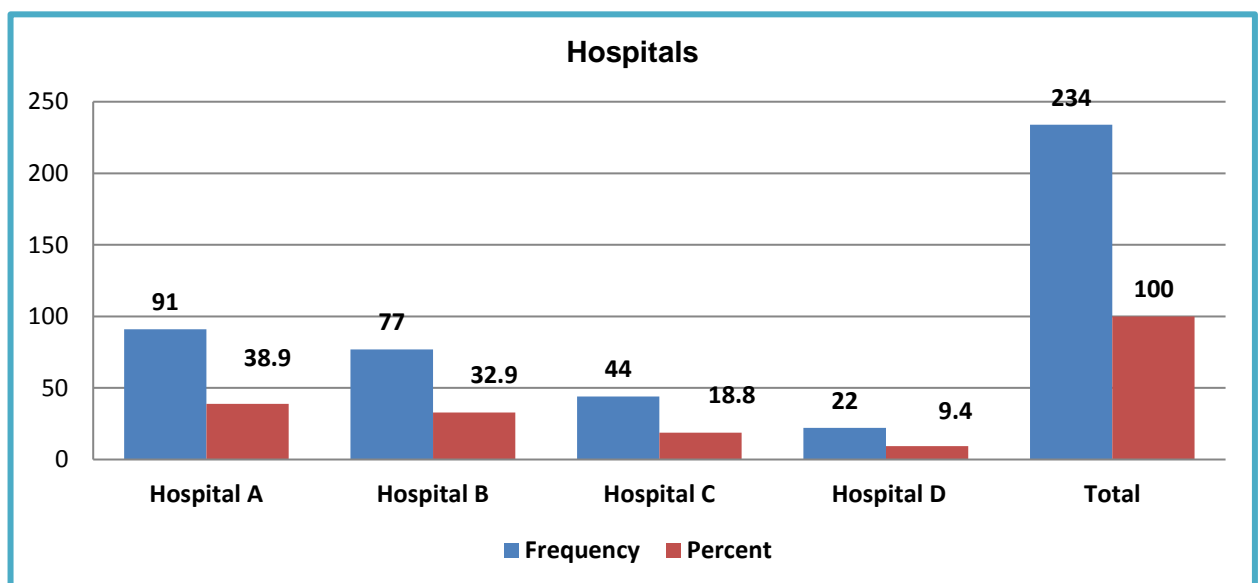
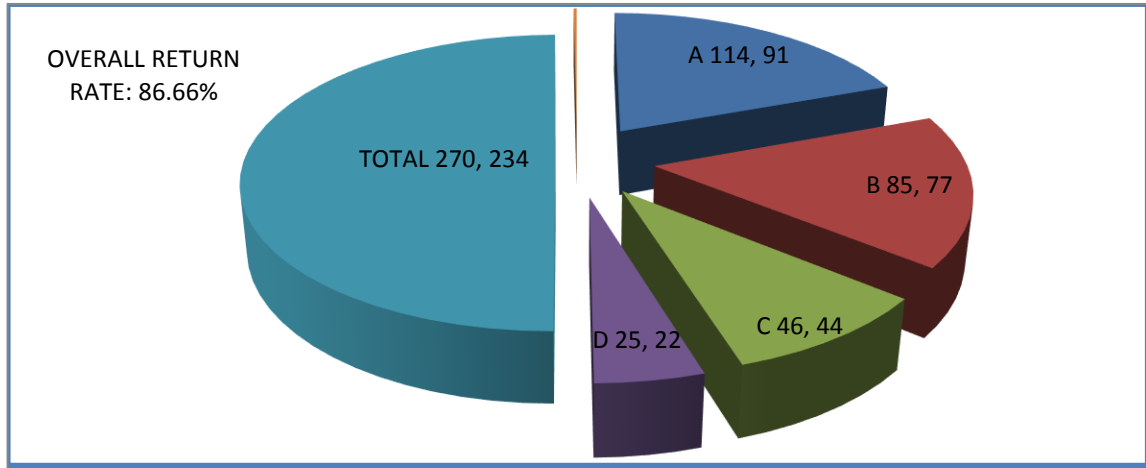


Figure 5.2: The participants per hospital in the study

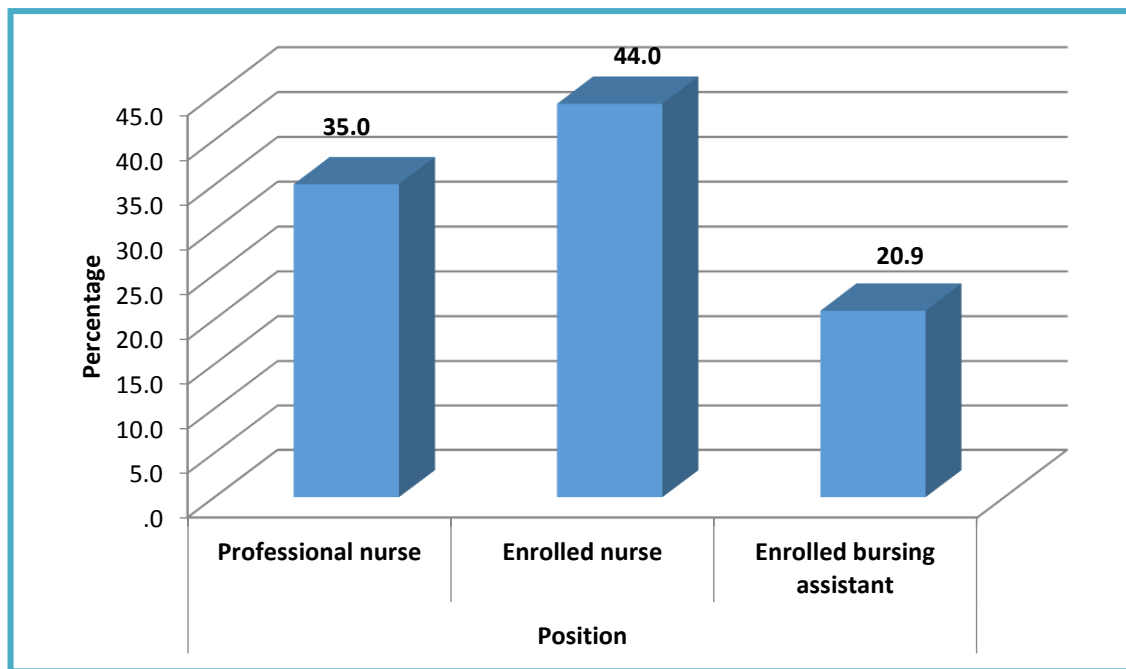
The results of the study also showed that the overall return rate in the quantitative phase of the study was measured at 86.66% as illustrated in Figure 5.3.



**Figure 5.3: Return rate in the quantitative phase of the study**

#### 5.6.1.2 The position of the participants in the study

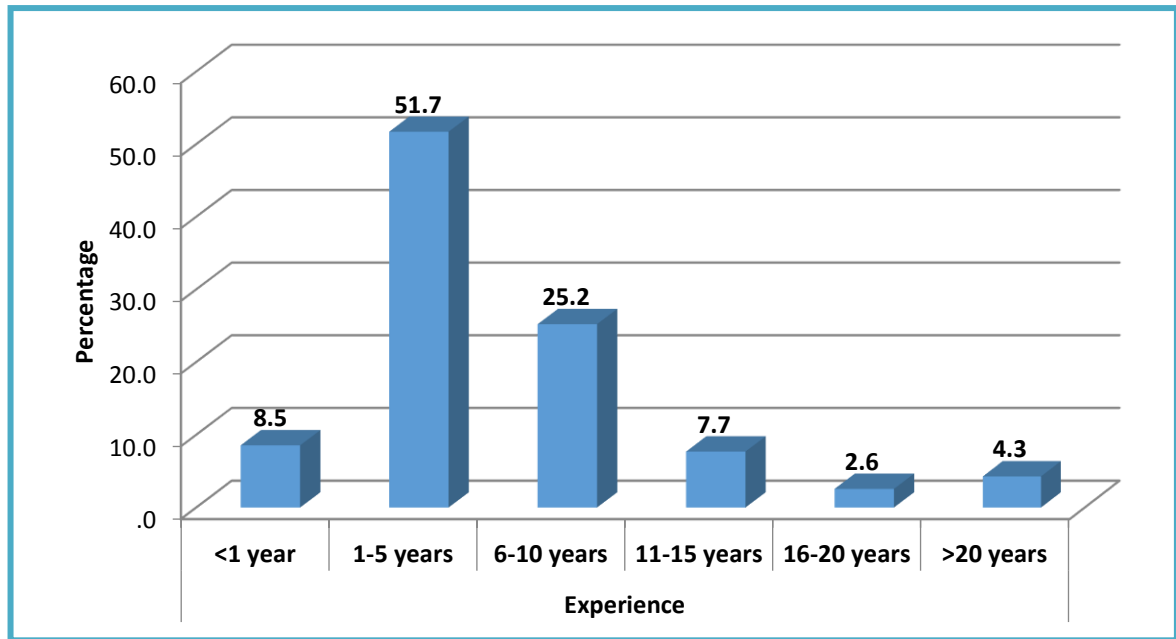
Participants were asked what their position at their hospital is. The overall results of the study showed that there were 35% (n=82) professional nurses, 44% (n=103) enrolled nurses and 20.9% (n=49) enrolled nursing assistants across all four hospitals as illustrated in Figure 5.4.



**Figure 5.4: The positions of participants in the study**

#### 5.6.1.3 The experience level of participants in the study

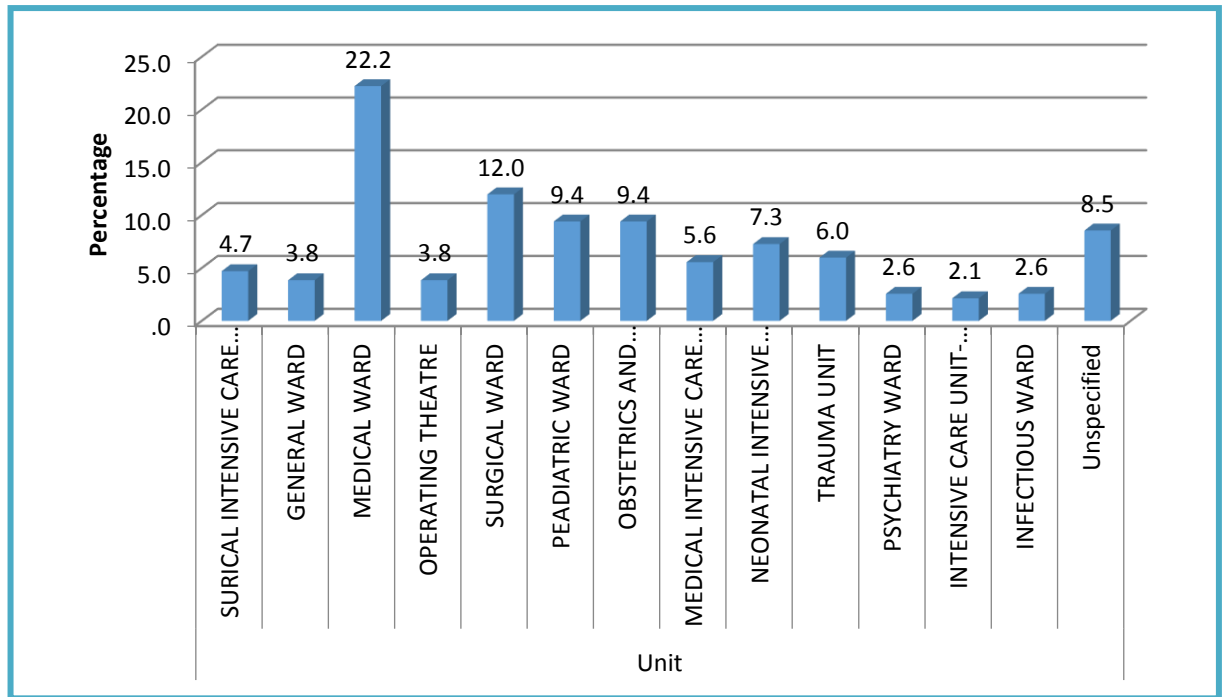
Participants were asked how long they worked at their hospital. The results of the study showed that the experience levels of the participants at their hospital ranged between 1 to 20 years. The number of participants with experience of less than 1 year was 8.5% (n=20), between 1-5 years 51.7% (n=121), between 6-10 years 25.2% (n=59), between 11-15 years 7.7% (n=18), between 16-20 years 2.6% (n=6) and more than 20 years (4.3%) n=10 as illustrated in Figure 5.5.



**Figure 5.5: The experience levels of participants in the study**

#### 5.6.1.4 The participants working unit

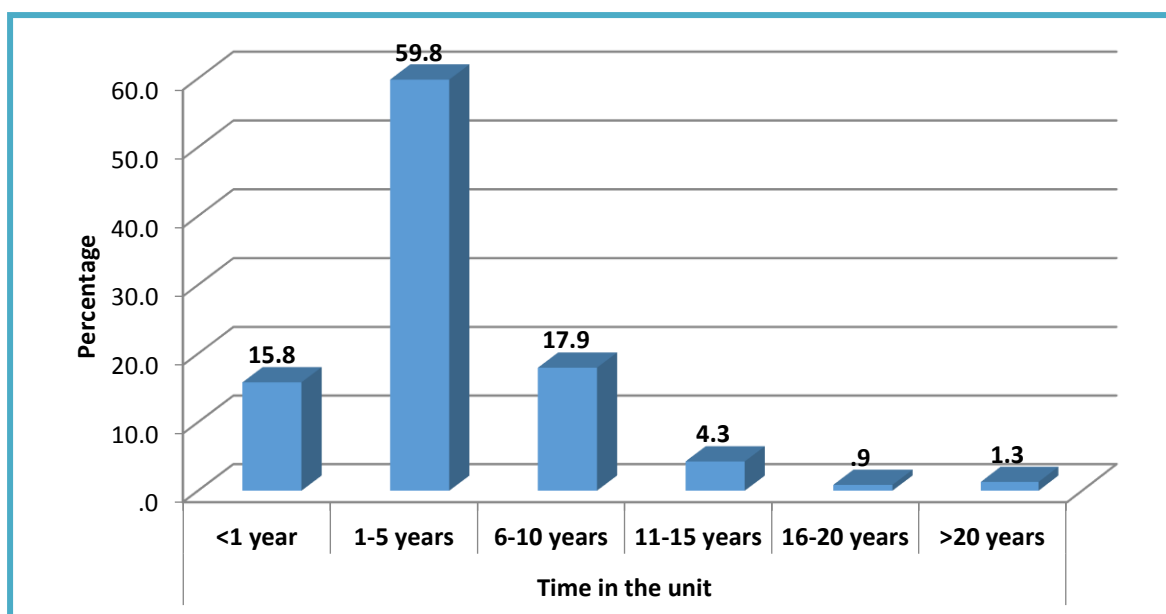
Participants were asked which unit they worked in. The results of the study showed that 4.7% (n=11) worked in the surgical intensive care unit, 3.8% (n=9) worked in the general ward, 22.2% (n=52) worked in the medical ward, 3.8% (n=9) worked in the operating theatre, 12% (n=28) worked in the surgical ward, 9.4% (n=22) worked in the obstetrics and gynaecology ward, 5.6% (n=13) worked in the medical intensive care unit, 7.3% (n=17) worked in the neonatal intensive care unit, 6% (n=14) worked in the trauma unit, 2.6% (n=6) worked in the psychiatry ward, 2.1% (n=5) worked in the general intensive care unit, 2.6% (n=6) worked in the infectious ward, with 8.5% (n=20) not responding to this question as illustrated in Figure 5.6.



**Figure 5.6: The participants' working unit**

#### 5.6.1.5 The participant's time spent working in the unit

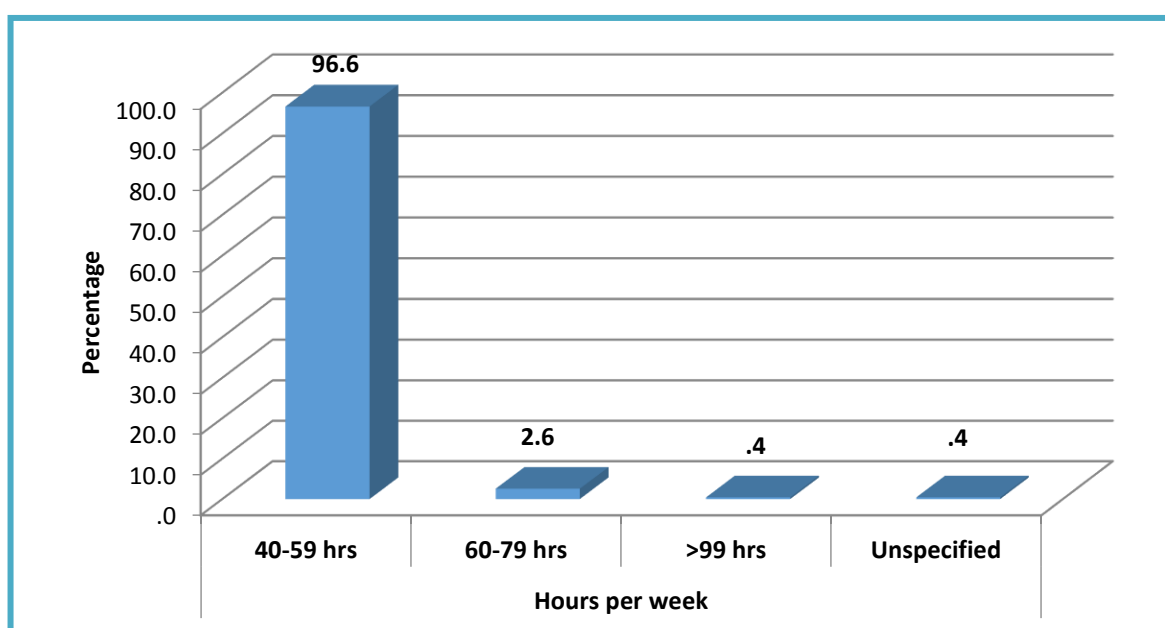
Participants were asked how long they worked in their current units. The results of the study showed that 15.8% (n=37) spent less than 1 year in the unit, 59.8% (n=140) spent 1-5 years in the unit, 17.9% (n=42) spent 6-10 years in the unit, 4.3% (n=10) spent 11-15 years in the unit, 9% (n=2) spent 16-20 years in the unit and 1.3% (n=3) spent more than 20 years in the unit as illustrated in Figure 5.7.



**Figure 5.7: The participant's time spent working in the unit**

#### 5.6.1.6 The working hours of the participants

Participants were asked how many hours per week they worked in the hospital. The results of the study showed that 96.6% (n=226) worked between 40-59 hours, 2.6% (n=6) worked between 60-79 hours, 4% (n=1) worked more than 99 hours and. 4% (n=1) did not respond to the question, as illustrated in Figure 5.8.



**Figure 5.8: The working hours of the participants**

### 5.6.1.7 The professional experience of the participants

Participants were asked how long they worked in their profession. The results of the study showed that 1.3% (n=3) worked less than 1 year in their professional role, 43.6% (n=102) worked between 1-5 years, 27.4% (n=64) worked between 6-10 years, 11.5% (n=27) worked between 11-15 years, 4.7% (n=11) worked between 16-20 years, 8.5% (n=20) worked more than 20 years and 3.0% (n=7) did not respond to this question as illustrated in Figure 5.9.

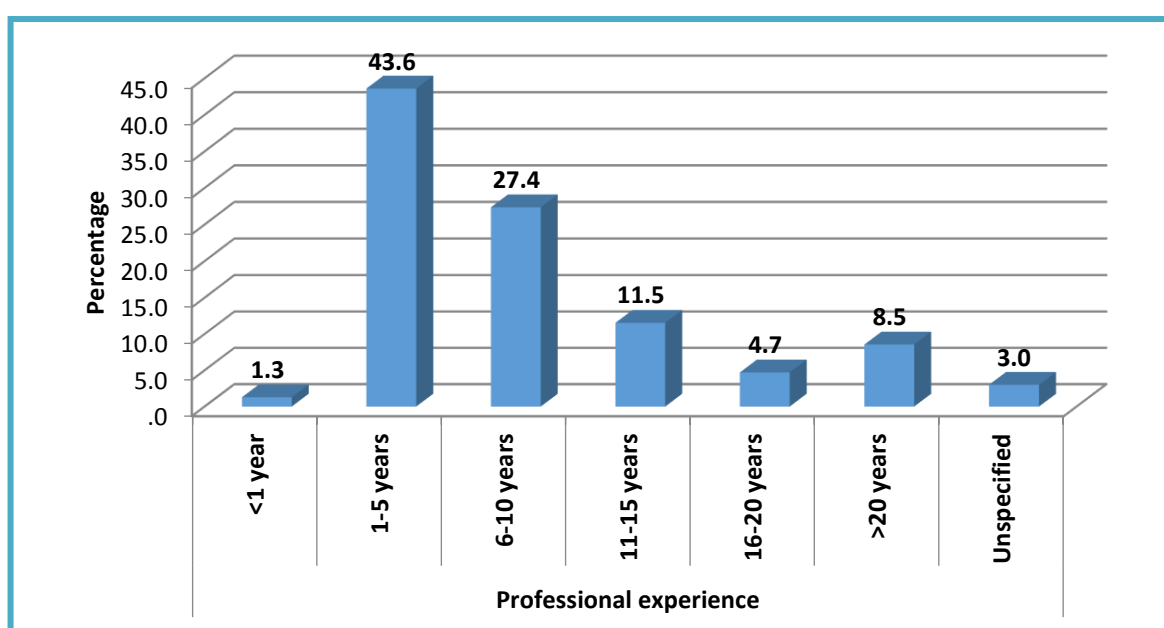


Figure 5.9: The professional experience of the participants

## 5.6.2 Section B: Findings from assessment by the auditors

### 5.6.2.1 Assessment of the Patient Rights domain

Participants were asked if the eight sub-domains within the Patient Rights domain were adequately assessed by the auditors during relicensing inspection. The following mean total responses were received for the various standards within the sub-domains across all four hospitals coded as Patient Rights (PR1-8). For respect and dignity, the mean score was 4.20 (n=233), information to patients 3.36 (n=231), physical access 4.33 (n=231), continuity of care 3.25 (n=233), reducing delays in care 3.31 (n=231), emergency care



3.31 (n=232), access to packages of service 4.16 (n=232), and complaints management 4.19 (n=232), as illustrated in Figure 5.10.

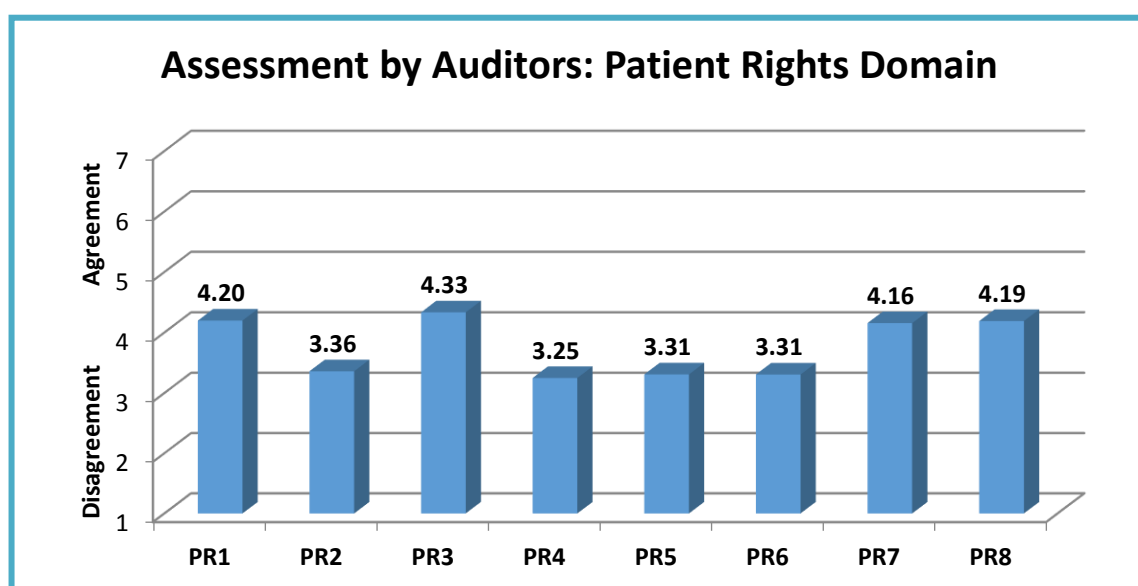


Figure 5.10: Assessment by auditors Patient Rights domain: Mean total responses

### PR1. The assessment of respect and dignity by the auditors

The results of the study showed that 15.4% (n=36) disagreed and 21.8% (n=51) agreed that this standard was assessed during relicensing inspection. There is significant agreement that respect and dignity was assessed by the auditors during relicensing inspection ( $M=4.20$ ,  $SD=2.300$ ),  $t(232) = 1.310$ ,  $p=.191$ .

### PR2. The assessment of Information to Patients by the auditors

The results of the study showed that 32.9% (n=77) disagreed and 14.5% (n=34) agreed that this standard was assessed during relicensing inspection. There is significant disagreement that information to patients regarding their treatment was assessed by the auditors during relicensing inspections ( $M=3.36$ ,  $SD=2.099$ ),  $t(230) = -4.640$ ,  $p<.0005$ .

### **PR3. The assessment of physical access for patients**

The results of the study showed that 20.5% (n=48) disagreed and 34.2% (n=80) agreed that this standard was assessed during relicensing inspection. There is significant agreement that safe access for the disabled was assessed by the auditors during relicensing inspections (M=4.33, SD=2.160),  $t(230) = 2.345$ ,  $p=.020$ .

### **PR4. The assessment of continuity of care**

The results of the study showed that 38.9% (n=91) disagreed and 15.4% (n=36) agreed that this standard was assessed during relicensing inspection. There is significant disagreement that continuity of care and giving patients information regarding referrals and specialists appointments was assessed by the auditors during relicensing inspections (M=3.25, SD=2.092),  $t(232) = -5.480$ ,  $p<.0005$ .

### **PR5. The assessment of reducing delays in care**

The results of the study showed that 37.2% (n=87) disagreed and 15.8 % (n=37) agreed that this standard was assessed during relicensing inspection. There is significant disagreement that managing waiting times for patients in order to improve patient satisfaction and care was assessed by the auditors during relicensing inspections (M=3.31, SD=1.977),  $t(230) = -5.324$ ,  $p<.0005$ .

### **PR6. The assessment of emergency care**

The results of the study showed that 35% (n=82) disagreed and 12% (n=28) agreed that this standard was assessed during relicensing inspection. There is significant disagreement that treating and stabilising emergency patients before transfer if needed was assessed by the auditors during relicensing inspections (M=3.31, SD=2.175),  $t(231) = -4.859$ ,  $p<.0005$ .

#### **PR7. The assessment of access to packages of service**

The results of the study showed that 23.9% (n=56) disagreed and 27.4% (n=64) agreed that this standard was assessed during relicensing inspection. There is significant agreement that providing services that meet national guidelines for hospitals was assessed by the auditors during relicensing inspections ( $M=4.16$ ,  $SD=2.175$ ),  $t(231) = 1.096$ ,  $p=.274$ .

#### **PR8. The assessment of complaints management process**

The results of the study showed that 19.7 % (n=46) disagreed and 29.1% (n=68) agreed that this standard was assessed during relicensing inspection. There is significant agreement that having a complaints management policy in place was assessed by the auditors during relicensing inspections ( $M=4.19$ ,  $SD=2.128$ ),  $t(231) = 1.358$ ,  $p=.176$ .

#### **5.6.2.2 Validity and reliability score for assessment of the Patient Rights domain**

For validity and reliability of scores for the assessment of the Patient Rights domain by the auditors, using factor analysis to show convergent and discriminant validity, promax rotation was applied to this domain. The results of the study showed that there was successful extraction of factors with two distinct and reliable factors being extracted ( $KMO = .869$ ). The two factors account for 84.4% of the variance in the data. Assessment of patients right Factor 1 items includes standards 1, 2, 4, 5 and 6 as these are all measures of patients' rights that are directly applied to each patient and assessment of patients' rights Factor 2 items includes standards 3, 7 and 8 which has to do with services that are indirectly applied to every patient. Cronbach's alpha is applied to each factor to ensure reliability. An alpha score of  $>.7$  indicates a reliable score. For Factor 1, Cronbach's alpha measured .944 and for Factor 2, Cronbach's alpha measured .921. There was significant disagreement for Factor 1 items ( $M=3.4948$ ,  $SD=1.92229$ ),  $t(233) = -4.020$ ,  $p<.0005$  and significant agreement for Factor 2 items ( $M=4.2286$ ,  $SD=1.98914$ ),  $t(233)$

=1.758,  $p=.080$ . Factor analysis, Patient Rights domain is illustrated in Table 5.3.

**Table 5.3: Factor Analysis: Assessment Patient Rights domain**

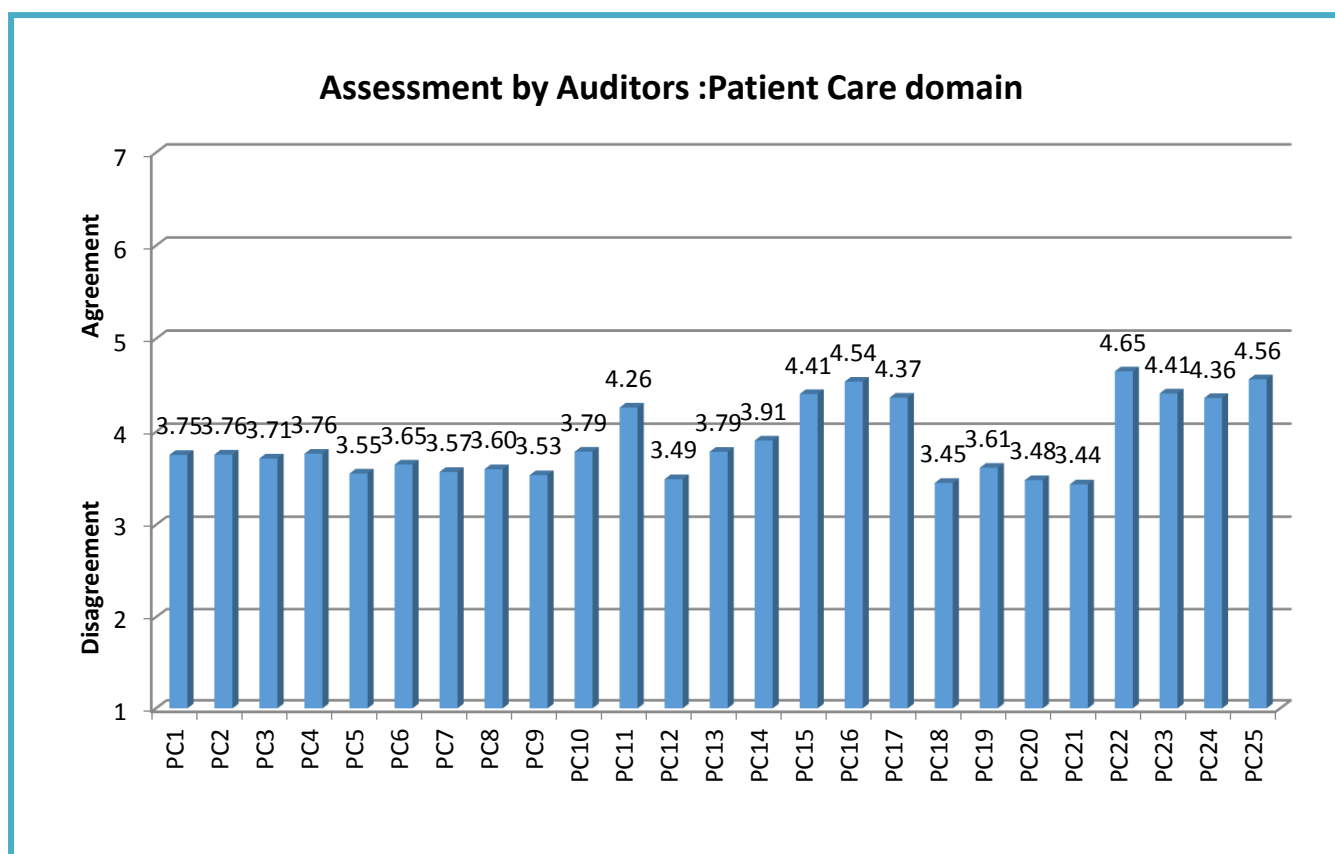
Pattern Matrix		
Assessment	Factor	
Patients Right domain	1	2
	<b>Cronbach's Alpha</b> .944	<b>Cronbach Alpha</b> .921
	<b>5 items</b>	<b>3 items</b>
4. Giving patients' information regarding referrals and specialist appointments.	.917	
2. Giving information to the patients regarding their treatment.	.897	
6. Treating and stabilising emergency patients before transfer if needed.	.813	
5. Managing waiting times for patients in order to improve patient satisfaction and care.	.740	
1. Treating patients with respect and dignity.	.698	
8. Having a Complaints Management Policy in place.		.986
7. Providing services that meet the national guidelines for hospitals		.836
3. Ensuring safe access for the disabled.		.673

#### 5.6.2.3 Patient Care, Patient Safety and Clinical Governance domains

Twenty five questions related to patient care domain were asked in the quantitative survey. The results of the study showed that when the participants were asked if aspects of the Patient Care domain were adequately assessed by the auditors during relicensing inspection the following total mean responses were received for the various standards within the Patient Care Sub-domain across all four hospitals, coded as Patient Care (PC 1-25). For Morse falls risk assessment tool for prevention of patient falls the mean was 3.75 (n=234), Waterloo risk assessment tool for the prevention of pressure sores 3.76 (n=233), IV cannulation bundle practice for the prevention of phlebitis 3.71 (n=234), hang-times for antibiotics 3.76 (n=234), chlorhexidine prewash before surgery 3.55 (n=234), bundle practice for the

prevention of SSI 3.65 (n=233), bundle practice for the prevention of ventilator acquired pneumonia 3.57 (n=234), bundle practice for the prevention of catheter associated UTI 3.60 (n=234), and bundle practice for the prevention of central line arterial bloodstream infection 3.53 (n=234).

Observation of the 5 Rs of medication administration 3.79 (n=234), observation of the six international patient safety goals 4.26 (n=234), change of shift report using situation, background, assessment and recommendation 3.49 (n=234), adequate care in the handling of sharps 3.79 (n=233), proper care in the handling of medical waste 3.91 (n=234), maintenance of standard precautions to prevent cross infection 4.41 (n=234), consistent application of hand hygiene principles 4.54 (n=234), daily monitoring of environmental risks 4.37 (n=234), safe administration of blood and blood products 3.45 (n=233), timeous reporting of adverse events 3.61 (n=233), following the time-out process for all invasive and surgical procedures 3.48 (n=233), adherence to inter-hospital and inter-departmental transfers processes 3.44 (n=234), understanding your job description 4.65 (n=234), participation in induction and orientation programmes 4.41 (n=233), participation in ward in-service training programmes 4.36 (n=234), and knowledge of unit policies and procedures 4.56 (n=234), as illustrated in Figure 5.11.



**Figure 5.11: Assessment by auditors: Patient Care domain: Mean total responses**

### **PC1. Morse falls risk assessment tool for the prevention of falls**

The results of the study showed that 27.4% (n=64) disagreed and 17.5% (n=41) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the Morse falls risk assessment tool was assessed by the auditors during relicensing inspections ( $M=3.75$ ,  $SD=2.242$ ),  $t(233) = -1.691$ ,  $p=.092$ .

### **PC2. The Waterloo risk assessment tool for the prevention of pressure sores**

The results of the study showed that 27.4% (n=64) disagreed and 18.4% (n=43) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the Waterloo risk assessment tool was assessed by the auditors during relicensing inspections ( $M=3.76$ ,  $SD=2.275$ ),  $t(233) = -1.641$ ,  $p=.102$ .

### **PC3. The Intravenous (IV) cannula bundle practice for the prevention of phlebitis**

The results of the study showed that 31.6% (n=74) disagreed and 18.4% (n=43) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the IV cannula bundle practice was assessed by the Auditors during relicensing inspections ( $M=3.71$ ,  $SD=2.221$ ),  $t(233) = -1.972$ ,  $p=.050$ .

### **PC4. Hangtime for antibiotics**

The results of the study showed that 28.2% (n=66) disagreed and 19.7% (n=46) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that hangtime for antibiotics was assessed by the auditors during relicensing inspections ( $M=3.76$ ,  $SD=2.212$ ),  $t(233) = -1.625$ ,  $p=.105$ .

### **PC5. Chlorhexidine prewash before surgery**

The results of the study showed that 33.3% (n=78) disagreed and 16.2% (n=38) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that chlorhexidine prewash before surgery was assessed by the auditors during relicensing inspections ( $M=3.55$ ,  $SD=2.157$ ),  $t(233) = -3.182$ ,  $p=.002$ .

### **PC6. Bundle practice for the prevention of SSI**

The results of the study showed that 29.5% (n=69) disagreed and 19.2% (n=45) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of SSI was assessed by the auditors during relicensing inspections ( $M=3.65$ ,  $SD=2.157$ ),  $t(232) = -2.491$ ,  $p=.013$ .

#### **PC7. Bundle practice for the prevention of ventilator acquired pneumonia**

The results of the study showed that 32.1% (n=75) disagreed and 15.8% (n=37) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of ventilator acquired pneumonia was assessed by the auditors during relicensing inspections ( $M=3.57$ ,  $SD=2.116$ ),  $t(233) = -3.120$ ,  $p=.002$ .

#### **PC8. Bundle practice for the prevention of catheter associated UTI**

The results of the study showed that 32.5% (n=76) disagreed and 18.8% (n=44) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of catheter associated UTI was assessed by the auditors during relicensing inspections ( $M=3.60$ ,  $SD=2.181$ ),  $t(233) = -2.818$ ,  $p=.005$ .

#### **PC9. Bundle practice for the prevention of central line arterial blood stream infection**

The results of the study showed that 34.6% (n=81) disagreed and 16.7% (n=39) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of central line arterial blood stream infection was assessed by the auditors during relicensing inspections ( $M=3.53$ ,  $SD=2.143$ ),  $t(233) = -3.325$ ,  $p=.001$ .

#### **PC10. Observation of the 5 Rs of medication administration**

The results of the study showed that 29.1% (n=68) disagreed and 15.0% (n=35) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that observation of the 5 Rs of medication administration was assessed by the auditors during relicensing inspections ( $M=3.79$ ,  $SD=2.276$ ),  $t(233) = -1.436$ ,  $p=.152$ .



### **PC11. Observation of the six international patient safety goals**

The results of the study showed that 23.1% (n=54) disagreed and 30.3% (n=71) agreed that this standard was assessed during relicensing inspection. There was significant agreement that observation of the six international patient safety goals was assessed by the auditors during relicensing inspections ( $M=4.26$ ,  $SD=2.211$ ),  $t(233)=1.804$ ,  $p=.073$ .

### **PC12. Change of shift report using situation, background, assessment and recommendation (SBAR)**

The results of the study showed that 35% (n=82) disagreed and 17.9% (n=42) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that SBAR was assessed by the auditors during relicensing inspections ( $M=3.49$ ,  $SD=2.093$ ),  $t(233)=-3.717$ ,  $p<.0005$ .

### **PC13. Adequate care and handling of sharps**

The results of the study showed that 31.2% (n=73) disagreed and 20.5% (n=48) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that adequate care and handling of sharps was assessed by the auditors during relicensing inspections ( $M=3.79$ ,  $SD=2.260$ ),  $t(233)=-1.449$ ,  $p=.149$ .

### **PC14. Proper care and management of medical waste**

The results of the study showed that 28.6% (n=67) disagreed and 22.2% (n=52) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the proper care and management of medical waste was assessed by the auditors during relicensing inspections ( $M=3.91$ ,  $SD=2.245$ ),  $t(233)=-6.41$ ,  $p=.0005$ .

#### **PC15. Maintenance of standard precautions to prevent cross infection**

The results of the study showed that 20.5% (n=48) disagreed and 32.1% (n=75) agreed that this standard was assessed during relicensing inspection. There was significant agreement that maintenance of standard precautions to prevent cross infection was assessed by the auditors during relicensing inspections ( $M=4.41$ ,  $SD=2.191$ ),  $t(233) = 2.835$ ,  $p = .005$

#### **PC16. Consistent application of hand hygiene principles**

The results of the study showed that 22.6% (n=53) disagreed and 32.9% (n=77) agreed that this standard was assessed during relicensing inspection. There was significant agreement that consistent application of hand hygiene principles was assessed by the auditors during relicensing inspections ( $M=4.54$ ,  $SD=2.171$ ),  $t(233) = 3.794$ ,  $p < .0005$

#### **PC17. Daily monitoring of environmental risks**

The results of the study showed that 23.1% (n=54) disagreed and 32.9% (n=77) agreed that this standard was assessed during relicensing inspection. There was significant agreement that daily monitoring of environmental risks was assessed by the auditors during relicensing inspections ( $M=4.37$ ,  $SD=2.107$ ),  $t(233) = 2.668$ ,  $p = .008$ .

#### **PC18. Safe administration of blood and blood products**

The results of the study showed that 32.9% (n=77) disagreed and 14.1% (n=33) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the safe administration of blood and blood products was assessed by the auditors during relicensing inspections ( $M=3.45$ ,  $SD=2.127$ ),  $t(232) = -3.942$ ,  $p < .0005$ .

#### **PC19. Timeous reporting of adverse events**

The results of the study showed that 30.3% (n=71) disagreed and 21.4% (n=50) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the timeous reporting of adverse events was assessed by the auditors during relicensing inspections ( $M=3.61$ ,  $SD=2.175$ ),  $t(232) = -2.711$ ,  $p = .007$ .

#### **PC20. The following of time-out process for all invasive and surgical procedures**

The results of the study showed that 31.6% (n=74) disagreed and 20.5% (n=48) agreed that this standard was assessed during relicensing inspection. There was significant disagreement that the time-out process for invasive and surgical procedures was assessed by the auditors during relicensing inspections ( $M=3.48$ ,  $SD=2.111$ ),  $t(232) = 3.755$ ,  $p < .0005$ .

#### **PC21. Adherence to inter-hospital and inter-departmental transfer processes**

The results of the study showed that 34.6% (n=81) disagreed and 20.5% (n=48) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that adherence to inter-hospital and inter-departmental transfer processes was assessed by the auditors during relicensing inspections ( $M=3.44$ ,  $SD=2.104$ ),  $t(233) = -4.101$ ,  $p < .0005$ .

#### **PC22. Understanding of job descriptions**

The results of the study showed that 18.4% (n=43) disagreed and 32.1% (n=75) agreed that this standard was assessed during relicensing inspection. There was significant agreement that staff understanding of their job descriptions was assessed by the auditors during relicensing inspections ( $M=4.65$ ,  $SD=2.108$ ),  $t(233) = 4.714$ ,  $p < .0005$ .

### **PC23. Participation in induction and orientation programmes**

The results of the study showed that 20.5% (n=48) disagreed and 30.3% (n=71) agreed that this standard was assessed during relicensing inspection. There was significant agreement that participation in induction and orientation programmes was assessed by the auditors during relicensing inspections (M=4.41, SD=2.152),  $t(232) = 2.922$ ,  $p = .004$ .

### **PC24. Participation in ward in-services training programmes**

The results of the study showed that 23.5% (n=55) disagreed and 36.3% (n=85) agreed that this standard was assessed during relicensing inspection. There was significant agreement that participation in ward in-service training programmes was assessed by the auditors during relicensing inspections (M=4.36, SD=2.094),  $t(233) = 2.653$ ,  $p = .009$ .

### **PC25. Knowledge of unit policies and procedures**

The results of the study showed that 18.4% (n=43) disagreed and 34.6% (n=81) agreed that this standard was assessed during relicensing inspection. There was significant agreement that staff knowledge regarding unit policies and procedures was assessed by the auditors during relicensing inspections (M=4.56, SD=2.148),  $t(233) = 4.016$ ,  $p < .0005$ .

#### **5.6.2.4 Validity and reliability score for assessment of Patient Care domain**

For validity and reliability scores for the assessment of Patient Care domain by the auditors, using factor analysis to show convergent and discriminant validity, promax rotation was applied. The results of the study showed that there was successful extraction of factors with two distinct and reliable factors being extracted (KMO = .956). The two factors account for 87.4% of the variance in the data. Assessment of patient care Factor 1 items include patient care standards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 18, 19, 20, 21 as these are policies that provide guidelines to direct patient care and apply to

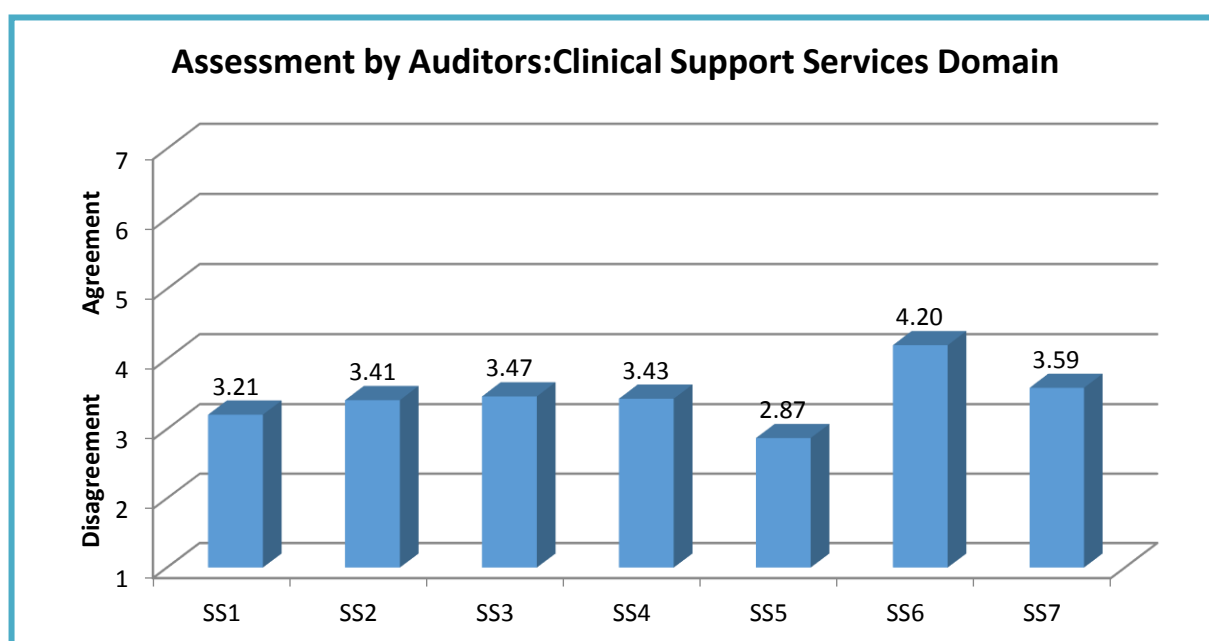
every patient and Factor 2 items which include patient care standards 15, 16, 17, 22, 23, 24, 25 which relate to policies and procedures which indirectly apply to each patient regarding improving patient care services. Cronbach's alpha is applied to each factor to ensure reliability. An alpha score of  $>.7$  indicates a reliable score. Cronbach's alpha for Factor 1 measured .991 and for Factor 2 measured .973. There was significant disagreement to assessment of patient care Factor 1 ( $M=3.6387$ ,  $SD=2.04107$ ),  $t(233) = -2.708$ ,  $p=.007$  and significant agreement to assessment of patient care Factor 2 ( $M=4.4709$ ,  $SD=1.98305$ ),  $t(233) = 3.632$ ,  $p<.0005$ . Factor analysis and assessment of the Patient Care domain is illustrated in Table 5.4.

**Table 5.4: Factor Analysis: Assessment of Patients Care domain**

<b>Assessment Patient Care domain</b>	<b>Factor</b>	
<b>Pattern Matrix</b>	<b>1</b>	<b>2</b>
	<b>Cronbach's Alpha .991</b>	<b>Cronbach's Alpha .973</b>
	17 Items	7 items
7. Bundle practice for the prevention of ventilator acquired pneumonia.	.964	
8. Bundle practice for the prevention of catheter associated UTI.	.951	
6. Bundle practice for prevention of SSI.	.951	
9. Bundle practice for the prevention of central line arterial blood stream infection.	.948	
4. Hang-times for antibiotics.	.921	
5. Chlorohexidine prewash before surgery.	.918	
12. Change of shift report using situation, background, assessment and recommendation.	.912	
18. Safe administration of blood and blood products.	.909	
3. IV cannulation bundle practice for the prevention of phlebitis.	.907	
20. Following of the time-out process for all invasive and surgical procedures.	.904	
10. Observation of the 5 Rs of medication administration.	.903	
21. Adherence to inter-hospital and inter-departmental transfer processes.	.902	
13. Adequate care and handling of sharps.	.875	
2. The Waterloo risk assessment tool for the prevention of pressure sores.	.857	
14. Proper care and management of medical waste.	.849	
1. Morse Falls risk assessment for the prevention of falls.	.844	
19. Timeous reporting of adverse events.	.831	
25. Knowledge of unit policies and procedures.		.973
23. Participation in induction and orientation programmes.		.945
24. Participation in ward in-service training programmes.		.943
22. Understanding of your job descriptions.		.941
17. Daily monitoring of environmental risks.		.849
16. Consistent application of hand hygiene principles.		.838
15. Maintenance of standard precautions to prevent cross infection.		.634

#### 5.6.2.5 Assessment of the Clinical Support Services domain

Seven questions relating to the clinical support services domains were asked in the survey. The results of the study showed that when the participants were asked if aspects of the clinical support services domain were adequately assessed by the auditors during relicensing inspections the following total mean responses were received for the various standards within the clinical support services sub-domain across all four hospitals, coded as Support Services (SS 1-7). For checking of the pharmacy related issues in the unit, the mean score was 3.21 (n=234), checking of diagnostic services in the unit 3.41 (n=233), checking of health technology services in the unit 3.47 (n=234), checking of sterilisation services in the unit 3.43 (n=233), checking of mortuary services in the unit 2.87 (n=225), checking of efficiency management services in the unit 4.20 (n=234), checking of therapeutic and support services in the unit 3.59 (n=233), as illustrated in Figure 5.12.



**Figure 5.12: Assessment by auditors: Clinical Support Services domain: Mean total responses**

### **SS1. The checking of pharmacy related issues in the unit**

The results of the study showed that 32.9% (n=77) disagreed and 17.1% (n=40) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that checking of pharmacy related issues in the unit was assessed by the auditors during relicensing inspections (M=3.21, SD=2.074),  $t(233) = -5.863$ ,  $p < .0005$ .

### **SS2. The checking of diagnostic services in the unit**

The results of the study showed that 30.8% (n=72) disagreed and 19.7% (n=46) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that checking of diagnostic services in the unit was assessed by the auditors during relicensing inspections (M=3.41, SD=2.020),  $t(232) = -4.444$ ,  $p < .0005$ .

### **SS3. The checking of health technology services in the unit**

The results of the study showed that 29.1% (n=68) disagreed and 10.2% (n=45) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that checking of health technology services in the unit was assessed by the auditors during relicensing inspections (M=3.47, SD=2.038),  $t(233) = -4.009$ ,  $p < .0005$ .

### **SS4. The checking of sterilisation services in the unit**

The results of the study showed that 30.3% (n=71) disagreed and 18.8% (n=44) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that sterilisation services in the unit was assessed by the auditors during relicensing inspections (M=3.43, SD=2.145),  $t(232) = -4.032$ ,  $p < .0005$ .



### **SS5. The checking of mortuary services in the unit**

The results of the study showed that 30.8% (n=72) disagreed and 11.1% (n=26) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that mortuary services in the unit was assessed by the auditors during relicensing inspections ( $M=2.87$ ,  $SD=1.817$ ),  $t(224) = -9.321$ ,  $p < .0005$ .

### **SS6. The checking of efficiency management services in the unit**

The results of the study showed that 19.2% (n=45) disagreed and 32.1% (n=75) agreed that this standard is assessed during relicensing inspection. There was significant agreement that efficiency management services in the unit was assessed by the auditors during relicensing inspections ( $M=4.20$ ,  $SD=2.142$ ),  $t(233) = -1.404$ ,  $p = .162$ .

### **SS7. The checking of therapeutic and support services in the unit**

The results of the study showed that 27.8% (n=65) disagreed and 22.6% (n=53) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that therapeutic and support services in the unit was assessed by the auditors during relicensing inspections ( $M=3.59$ ,  $SD=2.070$ ),  $t(232) = -3.038$ ,  $p = .003$ .

#### **5.6.2.6 Validity and reliability score for assessment of Clinical Support Services domain**

For validity and reliability scores for the assessment of the Clinical Support Services domain by the auditors using factor analysis to show convergent and discriminant validity, promax rotation was applied. The results of the study showed that there was successful extraction of one distinct and reliable factor ( $KMO = .899$ ). The one factor accounted for 81.8% for the variance in the data. There were seven items extracted. Factor 1 includes NCS standards 1, 2, 3, 4, 5, 6 and 7 as these support services policies provide guidelines to

direct and indirect patient care applied to each patient. Cronbach's alpha is applied to each factor to ensure reliability. An alpha score of  $>.7$  indicates a reliable score. Cronbach's alpha for Factor 1 measured .961. There was significant disagreement to the assessment of support services by the auditors ( $M=3.4585$ ,  $SD=1.83273$ ),  $t(233)=-4.520$ ,  $p<.0005$ . Factor analysis for the Support Services domain is illustrated in Table 5.5.

**Table 5.5: Factor analysis for assessment of the Clinical Support Services domain**

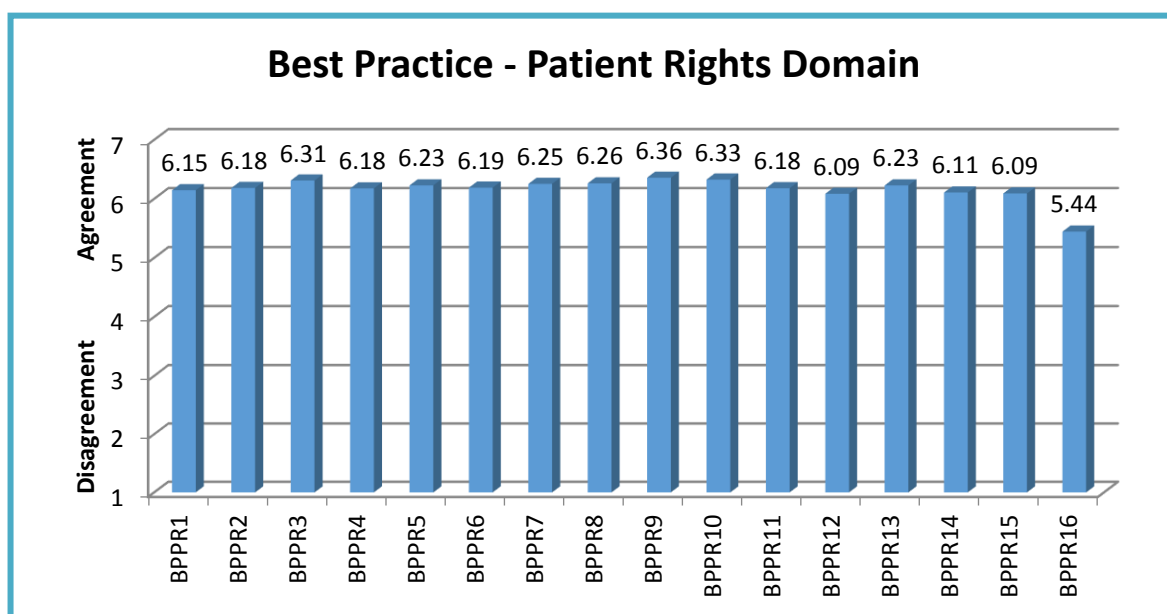
Factor Matrix	
	Factor
ASSESSMENT SUPPORT SERVICES DOMAIN	1
	Cronbach's Alpha .961
	7 items
3. The checking of health technology services in the unit.	.963
2. The checking of diagnostic services in the unit.	.961
4. The checking of sterilisation services in the unit.	.930
1. The checking of pharmacy related issues in the unit.	.926
7. The checking of therapeutic and support services in the unit.	.916
5. The checking of mortuary services in the unit.	.817
6. The checking of efficiency management services in the unit.	.682

### 5.6.3 Section C: Findings from assessment of evidence-based best practices

#### 5.6.3.1 Best practices: The Patient Rights domain

In this section of the study, the participants responded to 16 questions of evidence-based best practices that exist in the form of policies, directives or protocols that guide their nursing practice relating to the Patient Rights sub-domains. The results of the study showed that the following mean score responses were received for the evidence-based practice policies, directives or protocols that guide staff practice towards quality and patient safety across all four hospitals and coded as Best Practice, Patient Rights (BPPR 1-16).

Participant responded to applying best practice policy guidelines of the clinical domains to improve quality and patient safety in their hospital with a mean score of 6.15 (n=233). In observing the Batho Pele principles during nursing practice, the mean score was 6.18 (n=233). Acknowledging that patients have rights and responsibilities, the mean score was 6.31 (n=232). Observing the hospitals mission statement in daily practice, the mean score was 6.18 (n=233). Guided by the hospitals quality objectives, the mean score was 6.23 (n=233). Adhering to the customer complaints policy, the mean score was 6.19 (n=232). Knowledge of basic life support training policy, the mean score was 6.25 (n=233). Adhering to the staff dress code policy, the mean score was 6.26 (n=233). Adhering to the patient identification policy, the mean score was 6.36 (n=232). Adhering to the patient consent policy, the mean score was 6.33 (n=233). Taking care of the patients' property and valuables, the mean score was 6.18 (n=234). Applying the triage policy, the mean score was 6.09 (n=234). Implementing the resuscitation policy, the mean score was 6.23 (n=233). Applying the patient restraint policy, the mean score was 6.11 (n=234). Ensuring that patients receive a discharge summary, the mean score was 6.09 (n=231), and ensuring that service operating times and visiting hours are observed, the mean score was 5.44 (n=234), as illustrated in Figure 5.13.



**Figure 5.13: Best Practice Patient Rights domain: Mean total responses**

**BPPR1. Applying the clinical domains of the NCS to improve quality and patient safety**

The results of the study showed that 1.7% (n=4) disagreed and 45.3% (n=106) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.15, SD=1.044),  $t(232) = 31.365$ ,  $p < .0005$ .

**BPPR2. Observing the Batho Pele principles during nursing practice**

The results of the study showed that 1.7% (n=4) disagreed and 48.7% (n=114) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.18, SD=1.024),  $t(232) = 32.578$ ,  $p < .0005$ .

**BPPR3. Acknowledging that patients have rights and responsibilities**

The results of the study showed that 1.3% (n=3) disagreed and 45.7% (n=107) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.31, SD=.906),  $t(231) = 38.837$ ,  $p < .0005$ .

**BPPR4. Observing the hospitals mission statement in daily practice**

The results of the study showed that 1.3% (n=3) disagreed and 48.3% (n=113) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.18, SD=1.008),  $t(232) = 32.947$ ,  $p < .0005$ .

**BPPR5. Being guided by the hospital's quality objectives**

The results of the study showed that 1.3% (n=3) disagreed and 51.7% (n=121) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.23, SD=.935),  $t(232) = 36.353$ ,  $p < .0005$ .

#### **BPPR6. Adhering to the Customer Complaints Policy**

The results of the study showed that 1.7% (n=4) disagreed and 47.4% (n=111) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.19, SD=1.006),  $t(231) = 33.162$ ,  $p < .0005$ .

#### **BPPR7. Knowledge of the Basic Life Support Training Policy**

The results of the study showed that 1.7% (n=4) disagreed and 41.5% (n=97) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.25, SD=1.004),  $t(232) = 34.242$ ,  $p < .0005$ .

#### **BPPR8. Adhering to the Staff Dress Code Policy**

The results of the study showed that 1.7% (n=4) disagreed and 47.4% (n=111) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.26, SD=.976),  $t(232) = 35.371$ ,  $p < .0005$ .

#### **BPPR9. Adhering to the Patient Identification Policy**

The results of the study showed that 1.3% (n=3) disagreed and 43.2% (n=101) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.36, SD=.896),  $t(231) = 40.096$ ,  $p < .0005$ .

#### **BPPR10. Adhering to the Patient Consent Policy**

The results of the study showed that 1.7% (n=4) disagreed and 45.3% (n=106) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.33, SD=.931),  $t(232) = 38.128$ ,  $p < .0005$ .

### **BPPR11. Taking care of the patients' property and valuables**

The results of the study showed that 2.1% (n=5) disagreed and 44% (n=103) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.18, SD=1.053),  $t(233) = 31.655$ ,  $p < .0005$ .

### **BPPR12. Applying the Triage Policy**

The results of the study showed that 2.1% (n=5) disagreed and 47% (n=110) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.09, SD=1.093),  $t(233) = 29.190$ ,  $p < .0005$ .

### **BPPR13. Implementing the Resuscitation Policy**

The results of the study showed that 2.1% (n=5) disagreed and 46.2% (n=108) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.23, SD=1.006),  $t(232) = 33.787$ ,  $p < .0005$ .

### **BPPR14. Applying the Patient Restraint Policy**

The results of the study showed that 2.1% (n=5) disagreed and 47.9% (n=112) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.11, SD=1.057),  $t(233) = 30.490$ ,  $p < .0005$ .

### **BPPR15. Ensuring the patients receive a discharge summary**

The results of the study showed that 9% (n=2) disagreed and 43.6% (n=102) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.09, SD=1.140),  $t(230) = 27.868$ ,  $p < .0005$ .

### **BPPR16. Ensuring that service operating times and visiting hours are observed**

The results of the study showed that 7.7% (n=18) disagreed and 36.3% (n=85) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=5.44$ ,  $SD=1.980$ ),  $t(233) = 11.157$ ,  $p < .0005$ .

#### **5.6.3.2 Validity and reliability score for best practice Patient Rights domain**

For validity and reliability of scores for the assessment of best practice, Patient Rights domain by the nursing staff, using factor analysis to show convergent and discriminant validity, promax rotation was applied. The results of the study showed that there was successful extraction of one distinct and reliable factor ( $KMO = .944$ ). The one factor accounted for 71.4% for the variance in the data. There were 16 items extracted. Best practice, Patient Rights domain Factor 1 items include NCS standards 1-16 as these best practices support the Patient Rights domain in the form of policies or directives and applied directly and indirectly to each patient. Cronbach's alpha is applied to each factor to ensure reliability. An alpha score of  $>.7$  indicates a reliable score. Cronbach's alpha for Factor 1 measured. 961. There was significant agreement by the staff that best practices for the Patient Rights domain exists in their hospitals ( $M=6.1585$ ,  $SD=.87635$ ),  $t(233) = 37.678$ ,  $p < .0005$ . Factor analysis, for assessment of best practices by nursing staff as related to the Patient Rights domain is illustrated in Table 5.6.

**Table 5.6: Factor Analysis for Best Practice Patient Rights domain**

Factor Matrix	
Best Practice Patient Rights domain	Factor
	1
	Cronbach's Alpha .961
	16 Items
3. Acknowledging that patients have rights and responsibilities.	.918
6. Adhering to the Customer Complaints Policy.	.913
9. Adhering to the Patient Identification Policy.	.911
13. Implementing the Resuscitation Policy.	.898
10. Adhering to the Patient Consent Policy.	.894
4. Observing the hospital's mission statement in daily practice.	.878
12. Applying the Triage Policy	.860
8. Adhering to the Staff Dress Code Policy	.854
1. Applying the clinical domains of the NCS to improve quality and patient safety.	.854
7. Knowledge of the Basic Life Support Training Policy.	.847
14. Applying the Patient Restraint Policy.	.846
5. Being guided by the hospital's quality objectives.	.836
2. Observing the Batho Pele Principles during nursing practice.	.836
11. Taking care of the patients' property and valuables.	.829
15. Ensuring that patients receive a discharge summary.	.639
16. Ensuring that service operating times and visiting hours are observed.	.414

#### 5.6.4 Findings from the assessment of best practice patient care

##### 5.6.4.1 Patient Care, Patient Safety – Clinical Governance domain

In this section of the study, participants responded to 25 questions of evidence-based best practices that exist in the form of policies, directives or protocols that guide their nursing practice relating to the Patient Care sub-domains. The results of the study showed that the following mean score responses were received for evidence-based best practices and coded as Best Practice, Patient Care (BPPC 1-25). A mean score of 6.29 (n=234) was recorded for using the Morse falls risk assessment for the prevention of patient falls, 6.31 (n=233) was recorded for using Waterloo risk assessment



tool for the prevention of pressure sores, 6.38 (n=234) was recorded for using IV cannulation bundle practice for the prevention of phlebitis, 6.40 (n=234) was recorded for using hang-times for antibiotics as part of antibiotic stewardship, 6.34 (n=233) for using chlorhexidine prewash before surgery, 6.35 (n=232) was recorded for using bundle practice for the prevention of SSI, 5.91 (n=233) was recorded for using bundle practice for the prevention of ventilator acquired pneumonia, 6.37 (n=232) was recorded for using bundle practice for the prevention of catheter associated UTI, 6.30 (n=233) was recorded for using bundle practice for the prevention of central line arterial blood stream infection, 6.44 (n=234) was recorded for using the 5 Rs of medication administration in daily practice, 6.38 (n=234) was recorded for using the six international patient safety goals in daily practice, 6.33 (n=233) was recorded for using change of shift (SBAR) report for handover, 6.41 (n=234) was recorded for observing the handling of sharps and the Prevention of Needle Stick Injury Policy, 6.38 (n=234) was recorded for observing the guidelines for the proper care and management of medical waste, 6.37 (n=234) was recorded for observing the principles of infection control and standard precautions, 6.42 (n=232) was recorded for observing the principles of hand hygiene consistently, 6.19 (n=234) was recorded for reporting daily environmental risks, 5.52 (n=226) was recorded for applying the principles of breast-feeding, 6.13 (n=231) was recorded for reporting of adverse events, 6.15 (n=234) was recorded for applying the principles of clinical risk management, 5.64 (n=232) was recorded for applying the sentinel event policy requirements when necessary, 6.16 (n=234) was recorded for understanding the requirements of the staff education policy, 6.25 (n=232) was recorded for using the time-out procedure to identify patients before any invasive or surgical procedure, 6.32 (n=233) was recorded for using the guidelines of the Blood Transfusion Policy, 6.30 (n=232) was recorded for using the inter-hospital and inter-departmental transfer processes as illustrated in Figure 5.14.

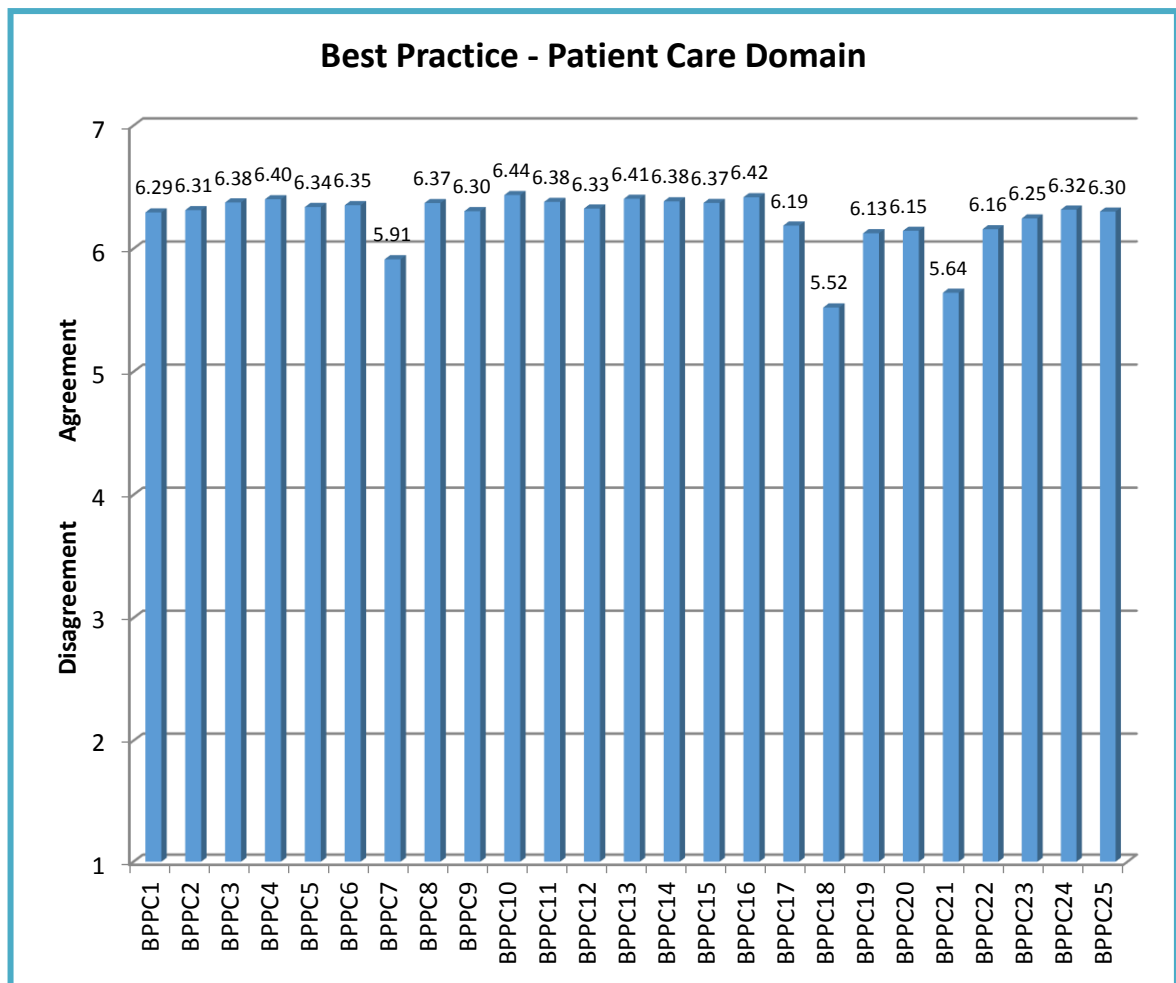


Figure 5.14: Best Practice: Patient Care domain: Mean total responses

#### **BPPC1. Using Morse falls risk assessment tool for the prevention of falls**

The results of the study showed that 0.9% (n=2) disagreed and 49.1% (n=115) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.29, SD=.809),  $t(233) = 43.370$ ,  $p < .0005$ .

#### **BPPC2. Using Waterloo risk assessment tool for the prevention of pressure sores**

The results of the study showed that 0.4% (n=1) disagreed and 46.2% (n=108) agreed that this policy directive guides their nursing practice. There is

significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.31$ ,  $SD=.804$ ),  $t(232)=43.896$ ,  $p<.0005$ .

### **BPPC3. Using IV cannulation bundle practice for the prevention of phlebitis**

The results of the study showed that 0.4% ( $n=1$ ) disagreed and 45.7% ( $n=107$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.38$ ,  $SD=.720$ ),  $t(233)=50.457$ ,  $p<.0005$ .

### **BPPC4. Using hang-times for antibiotic (Antibiotic Stewardship)**

The results of the study showed that 0.4% ( $n=1$ ) disagreed and 45.3 % ( $n=106$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.40$ ,  $SD=.718$ ),  $t(233)=51.143$ ,  $p<.0005$ .

### **BPPC5. Using Chlorhexidine prewash before surgery**

The results of the study showed that 0.9% ( $n=2$ ) disagreed and 43.2% ( $n=101$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.34$ ,  $SD=.881$ ),  $t(232)=40.510$ ,  $p<.0005$ .

### **BPPC6. Using bundle practice for the prevention of SSI**

The results of the study showed that 0.4% ( $n=1$ ) disagreed and 46.6% ( $n=109$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.35$ ,  $SD=.742$ ),  $t(231)=48.342$ ,  $p<.0005$ .

#### **BPPC7. Using bundle practice for the prevention of ventilator acquired pneumonia**

The results of the study showed that 1.7% (n=4) disagreed and 40.6% (n=95) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=5.91, SD=.1.346),  $t(232) = 21.709$ ,  $p < .0005$ .

#### **BPPC8. Using bundle practice for the prevention of catheter associated UTI**

The results of the study showed that 0.4% (n=1) disagreed and 44.4% (n=104) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.37, SD=.739),  $t(231) = 48.869$ ,  $p < .0005$ .

#### **BPPC9. Using bundle practice for the prevention of central line arterial blood stream infection**

The results of the study showed that 0.4% (n=1) disagreed and 42.7% (n=100) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.30, SD=.829),  $t(232) = 42.447$ ,  $p < .0005$ .

#### **BPPC10. Using the 5 Rs of medication administration in daily practice**

The results of the study showed that 0.9% (n=2) disagreed and 41.9% (n=98) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.44, SD=.757),  $t(233) = 49.220$ ,  $p < .0005$ .

#### **BPPC11. Using the six international patient safety goals in daily practice**

The results of the study showed that 0.4% (n=1) disagreed and 45.3% (n=106) agreed that this policy directive guides their nursing practice. There is

significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.38$ ,  $SD=.721$ ),  $t(233)=50.497$ ,  $p<.0005$ .

**BPPC12. Using change of shift report with Situation, Background, Assessment and Recommendation (SBAR)**

The results of the study showed that 0.4% ( $n=1$ ) disagreed and 48.7% ( $n=114$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.33$ ,  $SD=.723$ ),  $t(232)=49.124$ ,  $p<.0005$ .

**BPPC13. Observing the handling of sharps and prevention of needle stick injuries**

The results of the study showed that 0.4% ( $n=1$ ) disagreed and 46.6% ( $n=109$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.41$ ,  $SD=.688$ ),  $t(233)=53.460$ ,  $p<.0005$ .

**BPPC14. Observing the guidelines for the proper care and management of medical waste**

The results of the study showed that 0.4% ( $n=1$ ) disagreed and 47.4% ( $n=111$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.38$ ,  $SD=.704$ ),  $t(233)=51.836$ ,  $p<.0005$ .

**BPPC15. Observing the principles of infection control and standard precautions**

The results of the study showed that 0.9% ( $n=2$ ) disagreed and 50.0% ( $n=117$ ) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals ( $M=6.37$ ,  $SD=.720$ ),  $t(233)=50.419$ ,  $p<.0005$ .

#### **BPPC16. Observing the principles of hand hygiene consistently**

The results of the study showed that 0.9% (n=2) disagreed and 46.2% (n=108) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.42, SD=.728),  $t(231) = 50.589$ ,  $p < .0005$ .

#### **BPPC17. Reporting of daily environmental risks**

The results of the study showed that 0.4% (n=1) disagreed and 50.4% (n=118) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.19, SD=.818),  $t(233) = 40.941$ ,  $p < .0005$ .

#### **BPPC18. Applying the principles of breast-feeding**

The results of the study showed that 2.6% (n=6) disagreed and 34.2% (n=80) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=5.52, SD=1.347),  $t(225) = 16.985$ ,  $p < .0005$ .

#### **BPPC19. Reporting of adverse events timeously**

The results of the study showed that 0.9% (n=2) slightly disagreed and 44.4% (n=104) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.13, SD=.917),  $t(230) = 35.234$ ,  $p < .0005$ .

#### **BPPC20. Applying the principles of clinical risk management**

The results of the study showed that 0.4% (n=1) disagreed and 47.4% (n=111) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=6.15, SD=.920),  $t(233) = 35.684$ ,  $p < .0005$ .

**BPPC21. Applying the Sentinel Event Policy requirements when necessary**

The results of the study showed that 0.9% (n=2) disagreed and 39.7% (n=93) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based best practice exists in the hospitals (M=5.64, SD=1.385),  $t(231) = 18.057$ ,  $p < .0005$ .

**BPPC22. Understanding the requirements of the Staff Education Policy**

The results of the study showed that 1.7% (n=4) disagreed and 49.6% (n=116) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based practice exists in the hospitals (M=6.16, SD=.996),  $t(233) = 33.145$ ,  $p < .0005$ .

**BPPC23. Using the time-out procedure to identify patients before any invasive or surgical procedure**

The results of the study showed that 0.9% (n=2) disagreed and 51.7% (n=121) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based practice exists in the hospitals (M=6.25, SD=.808),  $t(231) = 42.308$ ,  $p < .0005$ .

**BPPC24. Using the guidelines of the Blood Transfusion Policy**

The results of the study showed that 0.9% (n=2) disagreed and 53% (n=124) agreed that this policy directive guides their nursing practice. There is significant agreement that this evidence-based practice exists in the hospitals (M=6.32, SD=.750),  $t(232) = 47.169$ ,  $p < .0005$ .

**BPPC25. Following the inter-hospital and inter-departmental transfer processes**

The results of the study showed that 0.4% (n=1) disagreed and 51.3% (n=120) agreed that this policy directive guides their nursing practice. There is

significant agreement that this evidence-based practice exists in the hospitals ( $M=6.30$ ,  $SD=.741$ ),  $t(231) = 47.305$ ,  $p < .0005$ .

#### 5.6.4.2 Validity and reliability score for best practice Patient Care domain

For validity and reliability of scores for the assessment of best practice, Patient Care domain, by the nursing staff, using factor analysis to show convergent and discriminant validity, promax rotation was applied. The results of the study showed that there was successful extraction of factors with two distinct and reliable factors being extracted ( $KMO = .938$ ). The two factors account for 59.4% of the variance in the data. Factor 1 includes NCS standards 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15 and 16 and these are all measures of risk management, best practice for patient care that are directly applied to each patient. Factor 2 includes clinical standards 7, 17, 18, 19, 20, 21, 22, 23, 24 and 25, which has to do with protocols relating to best practice that are applied both directly and indirectly to every patient. Cronbach's alpha is applied to each factor to ensure reliability. An alpha score of  $>.7$  indicates a reliable score. Cronbach's alpha for Factor 1 .974 and for Factor 2 .900. There was significant agreement by the nursing staff that best practice for patient care exists in their hospitals for both, for Factor 1 items ( $M=6.3651$ ,  $SD=.63833$ ),  $t(233) = 56.677$ ,  $p < .0005$  and Factor 2 items ( $M=6.0561$ ,  $SD=.76809$ ),  $t(233) = 40.949$ ,  $p < .0005$ . Factor analysis, for best practice patient's care domain is illustrated in Table 5.7.



**Table 5.7: Factor analysis: Best Practice Patient Care domain**

Pattern Matrix	Factor	
Best Practice Patient Care domain	1	2
	<b>Cronbach's Alpha .974</b>	<b>Cronbach's Alpha .900</b>
	<b>15 Items</b>	<b>10 items</b>
4. Using hang-times for antibiotics. (Antibiotic Stewardship)	.964	
5. Using chlorhexidine prewash before surgery.	.924	
13. Observing the Handling of Sharps and Prevention of Needle Stick Injuries Policy.	.921	
16. Observing the principles of hand hygiene consistently.	.890	
3. Using IV cannulation bundle practice for the prevention of phlebitis.	.868	
14. Observing the Guidelines for Proper Care and Management of Medical Waste.	.867	
15. Observing the principles of infection control and standard precautions.	.778	
12. Using change of shift report using situation, background, assessment and recommendation. (SBAR)	.776	
6. Using bundle practice for prevention of SSI.	.775	
10. Using the 5 Rs of medication administration in daily practice.	.683	
2. Using Waterloo risk assessment tool for the prevention of pressure sores.	.682	
11. Using the six international patient safety goals in daily practice.	.678	
1. Using Morse Falls risk assessment for the prevention of falls.	.669	
8. Using bundle practice for the prevention of catheter associated UTI.	.628	
9. Using bundle practice for the prevention of central line arterial blood stream infection.	.565	
20. Applying the principles of clinical risk management.		.750
24 Using the guidelines of the Blood Transfusion Policy.		.743
19. Reporting adverse events timeously.		.717
22. Understanding the requirements of the Staff Education Policy.		.710
18. Applying the principles of breast-feeding.		.703
21. Applying the Sentinel Event Policy requirements when necessary.		.662
23. Using the time-out procedure to identify patients before any invasive or surgical procedure.		.644
25. Following the inter-hospital and inter-departmental transfer processes.		.632
7. Using bundle practice for the prevention of ventilator acquired pneumonia.		.457
17. Reporting daily environmental risks.		.450

### 5.6.5 Findings from assessment of evidence-based best practices

#### Clinical Support Services domain

In this section of the study, participants responded to seven questions of evidence-based best practices that exist in the form of policies, directives or protocols that guide their nursing practice relating to the clinical support services sub-domains and coded as Best Practice Support Services (BPSS 1-7). A mean score of 6.24 (n=234) was recorded for adhering to the narcotic drug control policy, 6.29 (n=234) for adhering to the Medication Error Reporting Policy, 5.66 (n=233) for adhering to the Radiation Protection Policy, 6.29 (n=232) for adhering to the Blood and Blood Products Administration Policy, 6.23 (n=234) for maintaining critical asset registers for service records, 6.19 (n=233) for using the sterilisation process protocols, 5.82 (n=233) for using policies and procedures to guide all aspects of storage, removal and transportation of bodies to the mortuary, as illustrated in Figure 5.15.

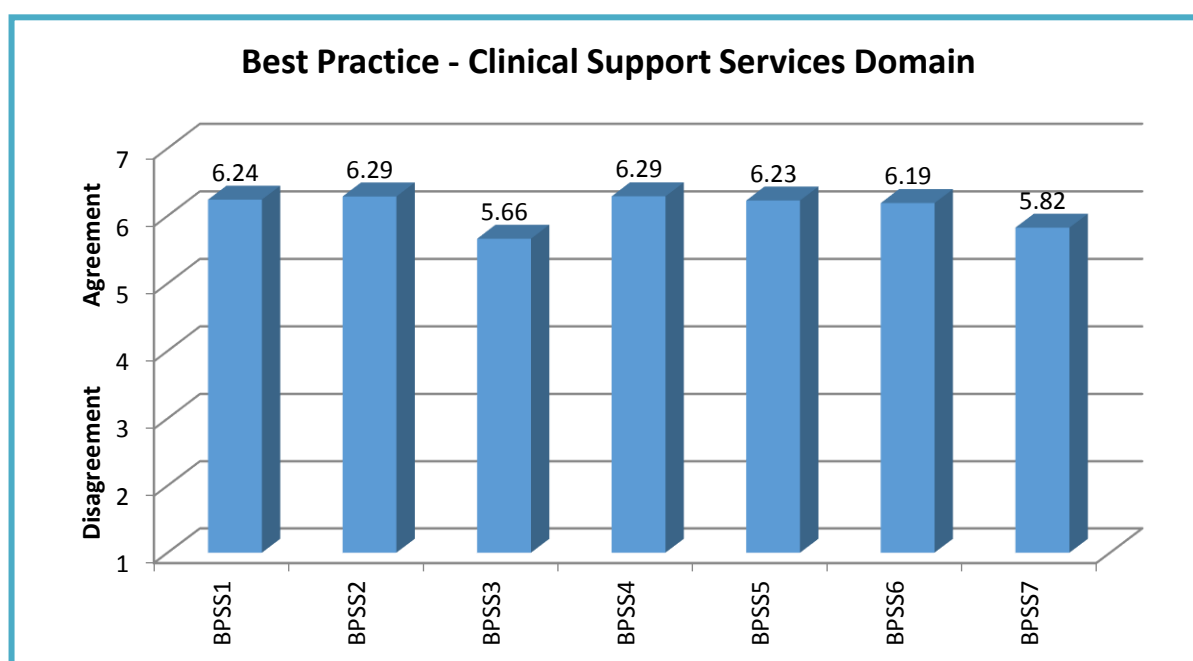


Figure 5.15: Best Practice: Clinical Support Services domain: Mean total responses

### **BPSSI. Adhering to the Narcotic Drug Control Policy**

The results of the study showed that 0.9% (n=2) disagreed and 46.2% (n=108) agreed that this policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=6.24, SD=1.029),  $t(233) = 33.297$ ,  $p < .0005$ .

### **BPSS2. Adhering to the Medication Error Reporting Policy**

The results of the study showed that 1.3% (n=3) disagreed and 53.0% (n=124) agreed that this policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=6.29, SD=.812),  $t(233) = 43.045$ ,  $p < .0005$ .

### **BPSS3. Adhering to the Radiation Protection Policy**

The results of the study showed that 1.3 % (n=3) disagreed and 37.6% (n=88) agreed that this policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=5.66, SD=1.408),  $t(232) = 18.001$ ,  $p < .0005$ .

### **BPSS4. Adhering to the Blood and Blood Product Administration Policy**

The results of the study showed that 1.3% (n=3) disagreed 49.6% (n=116) agreed that his policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=6.29, SD=.816),  $t(231) = 42.745$ ,  $p < .0005$ .

### **BPSS5. Maintaining critical asset registers for service records**

The results of the study showed that 1.3% (n=3) disagreed and 49.6% (n=116) agreed that this policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=6.23, SD=.915),  $t(233) = 37.230$ ,  $p < .0005$ .

### **BPSS6. Using the sterilisation process protocols**

The results of the study showed that 1.3% (n=3) disagreed and 48.3% (n=113) agreed that this policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=6.19, SD=.955),  $t(232) = 34.977$ ,  $p < .0005$ .

### **BPSS7. Using policies and procedures to guide all aspects of storage, removal and transportation of bodies to mortuary**

The results of the study showed that 5.1% (n=12) disagreed and 39.3% (n=92) agreed that this policy directive guides their nursing practice. There is significant agreement that this best practice exists in the hospitals (M=5.82, SD=1.553),  $t(232) = 17.924$ ,  $p < .0005$ .

#### **5.6.5.1 Validity and reliability score for best practice Clinical Support Services domain**

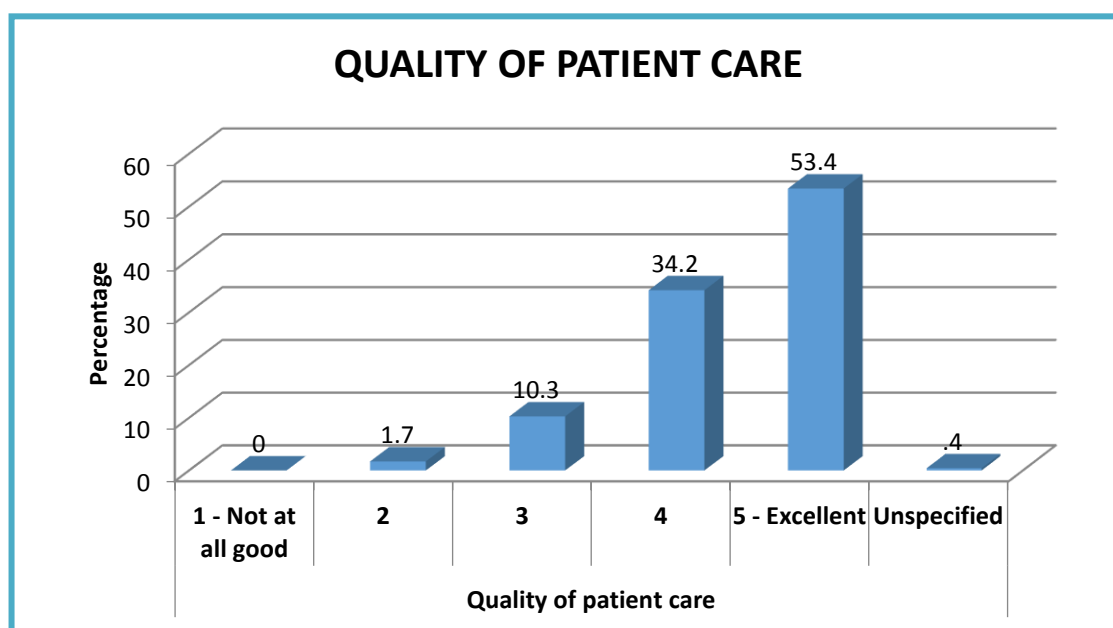
For validity and reliability of scores for the assessment of best practice, Clinical Support Services domain, by the nursing staff, using factor analysis to show convergent and discriminant validity, promax rotation was applied. The results of the study showed that there was successful extraction of one distinct and reliable factor (KMO = .874). The one factor accounted for 65.6% for the variance in the data. There were seven items extracted. Factor 1 includes clinical standards 1, 2, 3, 4, 5, 6 and 7 as these best practice policies for the Support Services domain provide guidelines to direct and indirect patient care applied to each patient. Cronbach's alpha is applied to each factor to ensure reliability. An alpha score of  $>.7$  indicates a reliable score. Cronbach's alpha for Factor 1 measured .889. There is significant agreement that this best practice exists in the hospitals (M=6.1008, SD=.85147),  $t(233) = 37.742$ ,  $p < .0005$ . Factor analysis for best practice in the support services domain is illustrated in Table 5.8.

**Table 5.8: Factor analysis for Best Practice Support Services domain**

Factor Matrix	Factor
<b>Best Practice Support Services domain</b>	<b>1</b>
	<b>Cronbach's Alpha .889</b>
	7 Items
4. Adhering to Blood and Blood Products Administration Policy.	.898
2. Adhering to the Medication Error Reporting Policy.	.862
5. Maintaining critical asset registers for service records.	.851
6. Using the sterilisation process protocols.	.799
1. Adhering to the Narcotic Drug Control Policy.	.686
3. Adhering to the Radiation Protection Policy.	.663
7. Using policies and procedures to guide all aspects of storage, removal and transportation of bodies to mortuary.	.637

#### 5.6.5.2 Findings from assessment of quality of patient care

A t-test was applied to test if the average score is different from 3. Participants responses when asked to rate their units on the quality of patient care. The results of the study showed that participants who responded held a high opinion of the quality of patient care in their units ( $M= 4.40$ ,  $SD=.742$ ),  $t(232) = 28.766$ ,  $p < .0005$  as illustrated in Figure 5.16.



**Figure 5.16: Participant responses: Assessment of quality of patient care**

## **5.7 REGRESSION ANALYSIS TO DETERMINE IF BEST PRACTICE FACTORS ARE SIGNIFICANT PREDICTORS OF QUALITY OF PATIENT CARE**

### **5.7.1 Best Practice on the Patient Rights domain Factor 1 (16 items) has an influence on the quality of patient care**

The results of the study showed that best practices when applied in the Patient Rights domain accounts for 10% ( $R^2 = .100$ ) of the variance in quality of patient care,  $F(1,231) = 25.605$ ,  $p < .0005$ . This independent variable significantly predicts the quality of patient care,  $\beta = .268$ ,  $p < .0005$ .

### **5.7.2 Best Practice on the Patient Care domain Factor 1 (15 items) has an influence on the quality of patient care**

The results of the study showed that best practices when applied in the Patient Care domain accounts for 10% ( $R^2 = .065$ ) of the variance in quality of patient care,  $F(1,231) = 16.139$ ,  $p < .0005$ . This independent variable significantly predicts the quality of patient care,  $\beta = .297$ ,  $p < .0005$ .

### **5.7.3 Best Practice on the Patient Care domain Factor 2 (10 items) has an influence on the quality of patient care**

The results of the study showed that best practices when applied in the Patient Care domain accounts for 10% ( $R^2 = .119$ ) of the variance in quality of patient care,  $F(1,231) = 31.300$ ,  $p < .0005$ . This independent variable significantly predicts the quality of patient care,  $\beta = .333$ ,  $p < .0005$ .

### **5.7.4 Best Practice on the Clinical Support Services domain Factor 1 (7 items) has an influence on the quality of patient care**

The results of the study showed that best practices when applied in the Clinical Support Services domain accounts for 10% ( $R^2 = .105$ ) of the variance in quality of patient care,  $F(1,231) = 27.229$ ,  $p < .0005$ . This

independent variable significantly predicts the quality of patient care,  $\beta = .283$ ,  $p < .0005$ .

## 5.8 FINDINGS FROM ASSESSMENT OF THE REPORTING STRUCTURE

A Chi-square goodness-of-fit test was applied to test if any of the options is selected significantly more than the others. The results of the study showed that a significant number indicated that they reported a corrected mistake most of the time (57, 24.4%) or always (134, 57.3%),  $\chi^2 (4) = 243.302$ ,  $p < .0005$ , as illustrated in Figure 5.17.

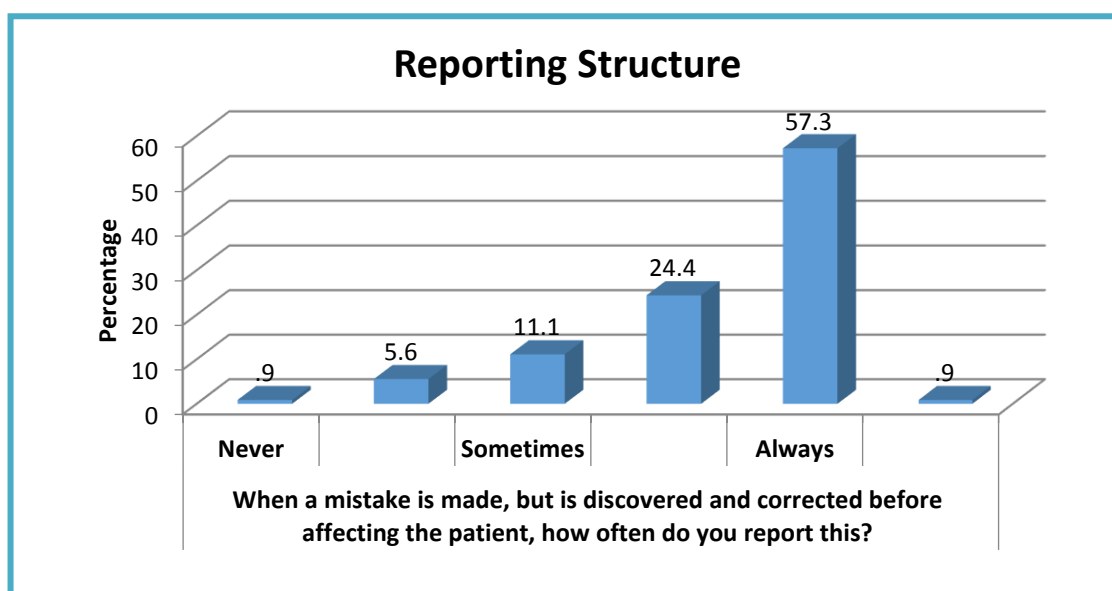
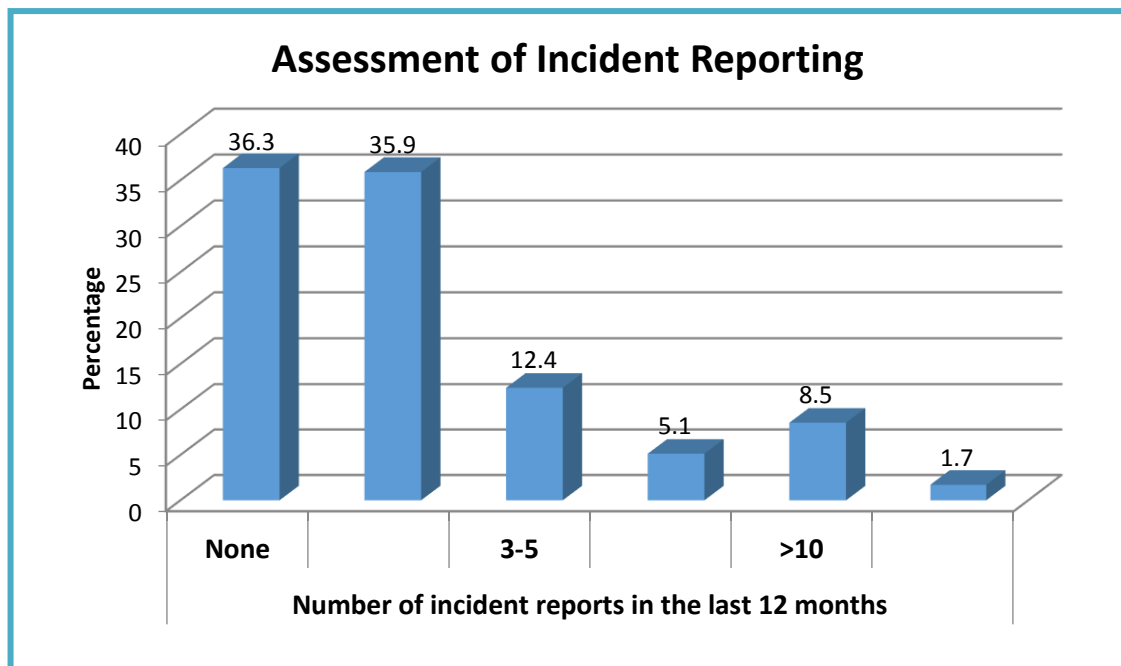


Figure 5.17: Participant responses: Assessment of reporting structure

## 5.9 FINDINGS FROM ASSESSMENT OF INCIDENT REPORTING

A Chi-Square goodness-of-fit test was applied to test if any of the options is selected significantly more than the others. The results of the study showed that participants reported the following number of incidents in the past 12 months, none ( $n=85$ , 36.3%), 1-2 ( $n=84$ , 35.9%), 3-5 ( $n=29$ , 12.4%), 6-10 ( $n=12$ , 5.1%) > 10 ( $n=20$ , 8.5%),  $\chi^2 (4) = 110.565$ ,  $p < .0005$ , as illustrated in Figure 5.18.



**Figure 5.18: Participant responses: Assessment of incident reporting**

## **5.10 COMPARISONS BETWEEN THE FOUR HOSPITALS**

The construct measures for the assessment by the auditors and the assessment of Best Practices was compared for the four hospitals using the Krusal Wallis Test. The results of the study showed that all of the measures differed significantly across hospitals as shown in Table 5.9 and Table 5.10.



**Table 5.9: Krusal Wallis Test to show comparative findings of construct measures**

Assessment by auditors		N	Mean	Std. Deviation	Best practice		N	Mean	Std. Deviation
PRF1	Hosp A	91	2.869	1.80803	BPPRF1	Hosp A	91	5.9864	.99369
	Hosp B	77	2.7792	1.33834		Hosp B	77	6.2744	.88934
	Hosp C	44	5.9011	1.13088		Hosp C	44	6.2066	.60521
	Hosp D	22	3.775	1.44895		Hosp D	22	6.3689	.66945
	Total	234	3.4948	1.92229		Total	234	6.1585	.87635
PRF2	Hosp A	91	4.5568	1.89675	BPPCF1	Hosp A	91	6.3353	.52781
	Hosp B	77	2.684	1.46589		Hosp B	77	6.4464	.80259
	Hosp C	44	5.9356	1.06216		Hosp C	44	6.2168	.55582
	Hosp D	22	4.8636	1.62864		Hosp D	22	6.5	.51956
	Total	234	4.2286	1.98914		Total	234	6.3651	.63833
PCF1	Hosp A	91	2.9795	1.95824	BPPCF2	Hosp A	91	5.9109	.68420
	Hosp B	77	2.71	1.53397		Hosp B	77	6.314	.84502
	Hosp C	44	5.9479	.92516		Hosp C	44	5.8457	.78818
	Hosp D	22	4.9973	1.16980		Hosp D	22	6.175	.49032
	Total	234	3.6387	2.04107		Total	234	6.0561	.76809
PCF2	Hosp A	91	4.821	1.76828	BPSSF1	Hosp A	91	5.8082	.92289
	Hosp B	77	2.7409	1.59468		Hosp B	77	6.3989	.73808
	Hosp C	44	6.0325	.87461		Hosp C	44	5.9426	.75457
	Hosp D	22	5.9545	.73558		Hosp D	22	6.5844	.51207
	Total	234	4.4709	1.98305		Total	234	6.1008	.85147
SSF1	Hosp A	91	3.2114	1.57542	Please rate your unit on the quality of patient care	Hosp A	91	4.19	.698
	Hosp B	77	2.5677	1.58562		Hosp B	77	4.69	.591
	Hosp C	44	5.533	1.10317		Hosp C	43	4.07	.910
	Hosp D	22	3.4491	1.68782		Hosp D	22	4.91	.294
	Total	234	3.4585	1.83273		Total	233	4.4	.742

**Table 5.10: Grouping variable: Hospitals to show comparative findings of construct measures**

Test Statistics <sup>a,b</sup>										
	PRF1	PRF2	PCF1	PCF2	SSF1	BPPRF1	BPPCF1	BPPCF2	BPSSF1	Please rate your unit on the quality of patient care
Chi-Square	81.840	83.287	85.482	96.113	71.005	10.672	11.525	21.122	36.975	42.836
df	3	3	3	3	3	3	3	3	3	3
Asymp. Sig.	.000	.000	.000	.000	.000	.014	.009	.000	.000	.000

#### **5.10.1 Assessment by the auditors: Patient Rights domain (PRF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Patient Rights domain across hospitals,  $\chi^2(3) = 81.840$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital C and Hospital D compared to Hospital A and Hospital B and more at Hospital C compared to Hospital D.

#### **5.10.2 Assessment by the auditors: Patient Rights domain (PRF2)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Patient Rights domain across hospitals,  $\chi^2(3) = 83.287$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital A and Hospital C compared to Hospital B and Hospital D and more at Hospital C compared to Hospital A.

#### **5.10.3 Assessment by the auditors: Patient Care domain (PCF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Patient Care domain across hospitals,  $\chi^2(3) = 85.482$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital C and Hospital D compared to Hospital A and Hospital B and more at Hospital C compared to Hospital D.

#### **5.10.4 Assessment by the auditors: Patients Care domain (PCF2)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Patient Care domain across hospitals,  $\chi^2 (3) = 96.113$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital A and Hospital C compared to Hospital D and Hospital B and more at Hospital A compared to Hospital C.

#### **5.10.5 Assessment by the auditors: Clinical Support Services domain (SSF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Clinical Support Services domain across hospitals,  $\chi^2 (3) = 71.005$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital A and Hospital C compared to Hospital B and Hospital D and more at Hospital C compared to Hospital A.

#### **5.10.6 Best Practice Patient Rights domain (BPPRF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of Best Practice in the Patient Rights domain across hospitals,  $\chi^2 (3) = 10.672$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital B and Hospital D compared to Hospital A and none at Hospital C.

#### **5.10.7 Best Practice Patient Care domain (BPPCF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of Best Practice in the Patient Care domain across hospitals,  $\chi^2 (3) = 11.525$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital B and Hospital D compared to Hospital A and Hospital C and more at Hospital B compared to Hospital D.

#### **5.10.8 Best Practice Patient Care domain (BPPCF2)**

The results of the study showed that there was a significant difference in the opinions of the assessment of Best Practice in the Patient Care domain across hospitals,  $\chi^2 (3) = 21.122$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital B compared to Hospital A and Hospital C and none at Hospital D.

#### **5.10.9 Best practice Support Services domain (BPSSF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of Best Practice in the Clinical Support Services domain across hospitals,  $\chi^2 (3) = 36.975$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital B and Hospital D compared to Hospital A and Hospital C and more at Hospital D compared to Hospital B.

#### **5.10.10 Scoring of the unit on the quality of patient care**

The results of the study showed that there was a significant difference in the opinions of the assessment of quality of patient care across hospitals,  $\chi^2 (3) = 42.836$ ,  $p < .0005$ . There is more agreement amongst staff that differences of quality of care exists and is greater at Hospital B and Hospital D compared to Hospital A and Hospital C.

#### **5.10.11 Comparisons by positions**

The results of the study showed that there were no significant differences evidenced across positions.

## **5.11 SECTION E: FINDINGS FROM THE RECOMMENDATIONS OF STAFF**

Four main themes and a number of sub-themes were identified regarding the perception of staff in their recommendations, namely:

- Recommendations of staff regarding the current relicensing audits.
- Recommendations of staff regarding mentorship and education.
- Recommendations of staff regarding patient safety issues.
- Recommendations of staff regarding staffing shortage.

### **5.11.1 Recommendations of staff regarding the current relicensing audits**

Sixty one percent (n=77) of participants recommended a standardised clinical audit tool for relicensing inspections in their hospitals. The following recommendations were received:

- Every aspect of patient care must be checked. More involvement with the nursing care of the patient.
- Auditors must check the equipment for safety.
- Auditors must check the environment for safety.
- Check if staffing is adequate for patient care.
- Check if every ward has a toilet for disabled patients.
- Check every ward has an isolation unit with negative pressure.
- An audit tool to guide the audit with rotation of the inspectors. There should be consistency with the audits.
- Neonates identification process should be checked during inspections.
- Evacuation procedures must be checked during inspections. Check fire extinguisher servicing records.
- Check guidelines and the correct handling of preparation of formula feeds in paediatric ward.
- Check pre- and post-operative guidelines and policy and procedure for wound care.
- Provide new ward with bath tubs for sitz baths.

- Patient safety and patient rights must be checked. Greet and speak to patients.
- Request more nursing staff involvement in the relicensing inspection.
- The auditors should be more approachable so that we can feel comfortable in answering their questions.
- Checking of hospitality and catering services. The cleanliness and preparation guidelines used for different diets according to the patients' diagnosis.
- Check the emergency exit route in CSSD which is too small.
- Check the guidelines and procedure and policy for patient visitors in ICU.
- Check correct hand washing techniques including visitors.
- Check if staff have a proper understanding of their job description.
- Have a separate audit tool for paediatrics and nursery because it is not the same as adults.
- A 26 bedded general must have a second duty station because from the main duty station it is too far.
- Acknowledge what we do.
- Check if signage is correct.
- To have a standard in place, instead of changing procedures without any policies or guidelines.
- Feedback to staff must be given to work on the issues.

#### **5.11.2 Recommendations of staff regarding mentorship and education**

- A mentor must be appointed for the ward particularly for new staff and also a new tool for audits.
- A mentor system to be in place where new staff are shadowed by permanent staff.
- Ensure staff are experienced in that department before employing with proper and thorough in-services.
- All staff at our organisation should follow policies and procedures regarding patient care, drug and transfer policies in the hospital.

- Improve fire training, in-service to be done more frequently.
- In-service of equipment required by representatives of company.
- Must have someone who can be your mentor.
- To improve quality of care of patients, facilitate teaching for staff.
- To improve standards of patient care.
- A mentor and protocols are required to guide the staff.
- Guidance requested on what is required by the Department of Health for relicensing inspections.

#### **5.11.3 Recommendations of staff regarding patient safety issues**

- Accommodation for boarder mothers to be improved.
- Access controls to trauma unit to be improved.
- Checking that the allocation of patients is suitable to the wards according to their diagnosis to prevent spread of infection.
- Department of Health visits are important to improve our hospital standards.
- The Visiting Hours Policy must be checked.
- Quality nursing care is provided to the patients.
- Emphasise infection control practices to the doctors.
- Improve on better system to avoid patients being turned down for operations that are required.
- The hospital provides patients with 100% nursing care and this is made possible by the availability of specialised technical equipment.
- More in-service and equipment is required.

#### **5.11.4 Recommendations of staff regarding staff shortage**

- More staff are required as the units are busy. I am not happy with serving of patients' meals.
- Assessment of the ratio of staff allocated to the wards.
- Department of Health should also inspect correct number of beds allocated to the ward.
- Emphasis be placed on staffing and hospital protocols.

- Medication cubicles should be put at each patient's bedside.
- Employ more staff.
- Revisit staffing levels. Staff salaries to be upgraded.
- SANC should come in for inspection. Must give us feedback on what we are doing wrong if anything we must implement as an institution. They must check if we have all the equipment for excellent nursing care. Even the staff must have in-service for excellent nursing care.
- To have enough nursing staff on day and night duty.
- Improve staffing levels so that we are not under pressure.

### **5.12 PHASE 3: DOCUMENTATION REVIEW**

A total of 59 documents in the form of policy and procedure relating to the NCS and the Batho Pele principles were reviewed from each hospital amounting to a total of 236 documents as indicated in Table 5.3. A checklist was used to record the review (Appendix 7). An assessment was made as to whether there were policies and procedures in existence as described by the participants in the first two phases of the study. The results of the documentation review showed that all hospitals have a master copy of the policies and procedures file relating to quality and patient safety, kept in the nursing manager's office. The researcher was informed that a special drive was created on the intranet for senior managers to review the policies and use these policies for staff education. The majority of the documents reviewed are written specifically for the information of the nursing workforce; however, some of them addressed issues related to all employees in the organisation. Some of the documents address a specific topic, for example, the management of sentinel events, nursing education, infection control, triage policy. Other documents such as employee occupational health and safety, and hand hygiene policy, are common to all employees, as they incorporate a variety of patient-staff-centred standards which contribute to quality and patient safety. All of these documents were expressed in the English language.



The language throughout the documents appears to be pitched at a level that is comprehensible to people with a reasonable command of written English. The documents were examined to determine to what extent the organisation supports and sustains its clinical governance to ensure quality and patient safety in keeping with the clinical domains of the NCS and the Batho Pele principles. As the unit of analysis is policy and procedure, only documents in the form of directives, policies and procedures relating to quality and patient safety were included in the sample. Pertinent documents relating to quality and patient safety are presented in tables below.

### 5.12.1 Evidence of service descriptions displayed

The service descriptions were found to be displayed for the staff and public to view as evidenced by documents D1-D5. The researcher found these documents placed at the hospital entrance and in the meetings rooms. The significance of service descriptions support the Patient Rights domain and in particular the Batho Pele principles. The results of the study showed 100% compliance to documents requested for review in this section as depicted in Table 5.11.

**Table 5.11: Service descriptions displayed**

DOC ID	DOCUMENT NAME	LANGUAGE	APPLICABLE TO	HOSP A		HOSP B		HOSP C		HOSP D		Overall
SECTION A	SERVICE DESCRIPTION DISPLAYED			Documents evidenced		Documents evidenced		Documents evidenced		Documents evidenced		
				YES	NO	YES	NO	YES	NO	YES	NO	Achieved
D1	Patient Rights Charter	English/IsiZulu	All	100 %		100 %		100 %		100 %		100 %
D2	The National Core Standards	English	All	100 %		100 %		100 %		100 %		100 %
D3	The Batho Pele Principles	English	All	100 %		100 %		100 %		100 %		100 %
D4	The Hospital Mission Statement	English	All	100 %		100 %		100 %		100 %		100 %
D5	The Hospital's Quality Objectives	English	All	100 %		100 %		100 %		100 %		100 %

### **5.12.2 Relevance of policies and procedures to the Patient Rights domain**

In relation to the Patient Rights domain, the documentation review evidenced the relevant policies and procedures related to the Patient Rights domain. The documents were reviewed in the nurse manager's office which is also accessible to the unit managers in the wards. The results of the study showed 100% compliance to documents requested for review in this section as depicted in Table 5.12. There were 12 documents reviewed applicable to all four hospitals (D6-D17) related to the Patient Rights domain and the Batho Pele principles. Policy D16 and D17 were not evidenced at two hospitals.

**Table 5.12: The Relevance of policies and procedures to the Patient Rights domain**

DOC ID	DOCUMENT NAME			HOSP A		HOSP B		HOSP C		HOSP D		Overall
SECTION B1	THE RELEVANCE OF POLICIES AND PROCEDURE TO THE NATIONAL CORE STANDARDS AND THE BPP'S PATIENT RIGHTS DOMAIN	LANGUAGE	APPLICABLE TO	Documents evidenced		Documents evidenced		Documents evidenced		Documents evidenced		Achieved
				YES	NO	YES	NO	YES	NO	YES	NO	
D6	Policy for Customer Complaints.	English	All	100 %		100 %		100 %		100 %		100 %
D7	Policy for Basic Life Support Training.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D8	Policy for Staff Dress Code.	English	All	100 %		100 %		100 %		100 %		100 %
D9	Policy for Patient Identification.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D10	Policy for Patient Informed Consent.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D11	Policy for Care of Patients' Valuables.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D12	Policy for Triage of Patients.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D13	Resuscitation Policy.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D14	Patient Restraint Policy.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D15	Discharge summary for in and outpatients.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D16	Visiting Hours Policy.	English	All	100 %		100 %			0 %		0 %	97 %
D17	Policy for Emergency Care.	English	Nursing	100 %		100 %		100 %	0 %		0 %	98 %

### 5.12.3 The relevance of policies and procedures to the Patient Care domain

In relation to the Patient Care domain, the documentation review evidenced the relevant policies and procedures related to the Patient Care domain. The documents were reviewed in the nurse manager's office which is also accessible to the unit managers in the wards. The results of the study showed 100% compliance to documents requested for review in this section as depicted in Table 5.13. There were 25 documents reviewed applicable to all four hospitals (D18-D42) and are related to the Patient Care domain and the Batho Pele principles.

**Table 5.13: The relevance of policies and procedures to the Patient Care domain**

DOC ID	DOCUMENT NAME			HOSP A		HOSP B		HOSP C		HOSP D		Overall
Section B2	THE RELEVANCE OF POLICIES AND PROCEDURE TO THE NATIONAL CORE STANDARDS AND THE BPP'S PATIENT CARE DOMAIN	LANGUAGE	APPLICABLE TO	Documents Evidence		Documents Evidence		Documents Evidence		Documents Evidence		Achieved
				YES	NO	YES	NO	YES	NO	YES	NO	
D18	Policy for Prevention of Patient Falls.	English	Nursing	100 %		100 %		100%		100%		100 %
D19	Policy for Prevention of Pressure Sores.	English	Nursing	100 %		100 %		100%		100%		100 %
D20	Directive for Hang-times of Antibiotics.	English	Nursing	100 %		100 %		100%		100%		100 %
D21	Directive for Hangtime of Antibiotics.	English	Nursing	100 %		100 %		100%		100%		100 %
D22	Policy for Chlorhexidine Prewash.	English	Nursing	100 %		100 %		100%		100%		100 %
D23	Directive for Prevention of SSI.	English	Nursing	100 %		100 %		100%		100%		100 %
D24	Directive for Prevention of Ventilator Acquired Pneumonia.	English	Nursing	100 %		100 %		100%		100%		100 %
D25	Directive for Prevention of Catheter Associated Infections.	English	Nursing	100 %		100 %		100%		100%		100 %

D26	Directive for the Prevention of Central Arterial Line Blood Stream Infections.	English	Nursing	100 %		100 %		100%		100%		100 %
D27	Policy for Medication Administration with the 5 Rs.	English	Nursing	100 %		100 %		100%		100%		100 %
D28	Directive for the six International Patient Safety Goals.	English	Nursing	100 %		100 %		100%		100%		100 %
D29	Directive for Hand over at Change of Shift.	English	Nursing	100 %		100 %		100%		100%		100 %
D30	Policy for Prevention of Sharps Injury.	English	General	100 %		100 %		100%		100%		100 %
D31	Policy for Care and Management of Medical Waste.	English	General	100 %		100 %		100%		100%		100 %
D32	Policy for Infection Prevention and Control.	English	Nursing	100 %		100 %		100%		100%		100 %
D33	Policy for Hand Hygiene.	English	General	100 %		100 %		100%		100%		100 %
D34	Policy for Environmental Risk Management.	English	Nursing	100 %		100 %		100%		100%		100 %
D35	Policy for Breast-Feeding.	English	Nursing	100 %		100 %		100%		100%		100 %
D36	Policy for Incidence And Adverse Events Reporting.	English	Nursing	100 %		100 %		100%		100%		100 %
D37	Policy for Management of Clinical Risks.	English	General	100 %		100 %		100%		100%		100 %
D38	Policy Sentinel Events.	English	General	100 %		100 %		100%		100%		100 %
D39	Policy for Staff Education.	English	General	100 %		100 %		100%		100%		100 %
D40	Directive for Time-out Procedures	English	Nursing	100 %		100 %		100%		100%		100 %
D41	Policy for Blood Transfusions.	English	Nursing	100 %		100 %		100%		100%		100 %
D42	Policy for Inter-Hospital Transfers.	English	Nursing	100 %		100 %		100%		100%		100 %

#### 5.12.4 Relevance of policies and procedures to the Clinical Support Services domain

In relation to the Clinical Support Services domain, the documentation review evidenced the relevant policies and procedures related to the Support Services. The documents were reviewed in the nurse manager's office which is also accessible to the unit managers in the wards. The results of the study showed 100% compliance to documents requested for review in this section as depicted in Table 5.14. There were seven documents reviewed applicable

to all four hospitals (D43-D49) and are related to Support Services and the Batho Pele principles.

**Table 5.14: The Relevance of policies and procedures to the Support Services domain**

SECTION B3	THE RELEVANCE OF POLICIES AND PROCEDURE TO THE NATIONAL CORE STANDARDS AND THE BPP'S PATIENT CARE DOMAIN CLINICAL SUPPORT SERVICES DOMAIN	LANGUAGE	APPLICABLE TO	HOSP A		HOSP B		HOSP C		HOSP D		Overall
				Documents Evidence		Documents Evidence		Documents Evidence		Documents Evidence		Achieved
				YES	NO	YES	NO	YES	NO	YES	NO	
D43	Policy for the Control of Narcotic Drugs.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D44	Policy for Reporting Medication Errors.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D45	Policy for Radiation Protection.	English	General	100 %		100 %		100 %		100 %		100 %
D46	Policy for Ordering and Administering Blood and Blood Products.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D47	Policy for Preventative Maintenance of Critical Assets.	English	General	100 %		100 %		100 %		100 %		100 %
D48	Policy for Assessing Sterilisation of Equipment.	English	General	100 %		100 %		100 %		100 %		100 %
D49	Policy for Storage, Removal and Transportation to Mortuary Services.	English	Nursing	100 %		100 %		100 %		100 %		100 %

### 5.12.5 Documents supporting the competence of nursing staff through formal processes

In relation to documents for formal staff processes, the documentation review evidenced the relevant policies and procedures related to staff education and staff formal processes. The documents were reviewed in the nurse manager's office which is also accessible to the unit managers and staff in the wards. The results of the study showed 100% compliance to documents requested for review in this section as depicted in Table 5.15. There were 10 documents

reviewed applicable to all four hospitals (D50-D59) and are related to the NCS and the Batho Pele principles.

**Table 5.15: Documents supporting the competence of nursing staff through formal processes**

DOC ID	DOCUMENT NAME	LANGUAGE	APPLICABLE TO	HOSP A		HOSP B		HOSP C		HOSP D		Overall
SECTION C	THE RELEVANCE OF POLICIES AND PROCEDURES TO THE NATIONAL CORE STANDARDS AND THE COMPETENCE DOCUMENTS FOR NURSING STAFF											achieved
				Documents evidenced		Documents evidenced		Documents evidenced		Documents evidenced		
				YES	NO	YES	NO	YES	NO	YES	NO	
D50	Relevant Unit Teaching Records.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D51	Staff educational files.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D52	Staff induction orientation programmes.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D53	Hand hygiene certificates.	English	General	100 %		100 %		100 %		100 %		100 %
D54	BLS certificates.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D55	Staff job descriptions.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D56	Staff appraisals.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D57	Staff CPD training schedules.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D58	Staff annual practising certificates.	English	Nursing	100 %		100 %		100 %		100 %		100 %
D59	Acknowledgement of unit policies and procedures.	English	Nursing	100 %		100 %		100 %		100 %		100 %

### 5.13 SUMMARY OF THE CHAPTER

Chapter 5 presented the results for the qualitative and quantitative strands of the study. The next chapter discusses mixing and merging of the results of the study in relation to the study's objectives and to the conceptual framework chosen for the study.

## **CHAPTER 6: MIXING AND MERGING THE RESULTS OF THE STUDY**

### **6.1 INTRODUCTION**

The results were merged in this discussion, where the quantitative results were used to corroborate the qualitative results. In mixing and merging the data the researcher intended to integrate the results by reporting the results together in this section of the study, firstly by reporting the qualitative quotes or themes followed by reporting the quantitative statistical results that validated or refuted the qualitative findings (Fielding 2012: 124-136). This integration occurred through the use of tables or figures that displayed both the qualitative and the quantitative results in the form of data displays. The discussion in this section is based on the clinical domains of the NCS and the Batho Pele principles on which the conceptual model was built and the study objectives that guided the study. The clinical domains (Patient Rights, Safety, Clinical Governance and Care, and Clinical Support Services) are those domains that are directly involved with the core business of the health system of delivering quality healthcare to patients or users of the service (Department of Health 2011: 10a).

### **6.2 PATIENT RIGHTS DOMAIN: ASSESSMENT BY AUDITORS AND THE EXISTENCE OF BEST PRACTICES**

#### **Domain 1: Major theme 1: Inadequate checking of the Patient Rights domain during relicensing inspections**

The major theme and sub-themes identified in the Patient Rights domain are illustrated in Table 5.2, Chapter 5. The major theme and sub-themes in this domain related to inadequate and inconsistent checking of the Patient Rights domain during relicensing inspections. Participants also indicated that a standardised audit tool did not exist for private hospitals in eThekweni district



and recommended that an audit tool be implemented for relicensing inspections. The results in the quantitative phase showed that the mean responses to assessment by the auditors of the eight sub-domains in the Patient Rights domain indicated that there were significant agreements and disagreements regarding the NCS and to the Batho Pele principles being checked during relicensing inspections and this finding is directly related to Objective 1 of the study. The mean total responses to the Patient Rights domain are depicted in Figure 5.10 in Chapter 5.

### **6.2.1 Merging and triangulation of the different data sources: Assessment of the Patient Rights domain by the auditors**

The merging and integration of data sets was achieved through triangulation of the different data sources and combining the results together to compare, validate and corroborate the results (Creswell 2014: 275). The overall results of the Patient Rights domain showed that the findings from the quantitative phase validated the findings of the qualitative phase in which the main theme was that there is inadequate checking of the Patient Rights domain by the auditors during relicensing inspection. The quantitative results also validated the findings of the sub-themes in the qualitative phase of the study, in that there was inconsistent checking of the Patient Rights domain during relicensing inspection. The recommendations from the participants in both the qualitative and quantitative strands of the study corroborated the findings, in which participants requested for a standardised audit tool for relicensing inspection. Further corroboration of the findings in the quantitative phase of the study were found in the responses from the open-ended question from participants, 61% (n=77) who offered recommendations for a standardised audit tool for relicensing inspections. The quantitative results overall validated the findings of the qualitative phase in that four of the eight Patient Rights sub-domains showed results of significant disagreements. Through the merging and integration of the different data sources the researcher was further able to corroborate and validate the findings of the qualitative results in relation to its main and sub-themes through analysing the significant

agreements and disagreements in the quantitative results, from the participants as discussed below.

### **6.2.2 Significant agreements to PR1: The assessment of respect and dignity by the auditors**

#### **PR1. The assessment of respect and dignity by the auditors**

In the qualitative phase of the study, this question received mixed responses from the participants and in the quantitative phase the results showed that 15.4% (n=36) disagreed and 21.8% (n=51) agreed that this standard is assessed during relicensing inspection. There was significant agreement that respect and dignity was assessed by the auditors during relicensing inspection ( $M=4.20$ ,  $SD=2.300$ ),  $t(232) = 1.310$ ,  $p=.191$ . Overall, the quantitative results validated the qualitative findings on the assessment by the auditors of respect and dignity during relicensing inspection in keeping with the main theme that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

### **6.2.3 Significant agreements PR3: The assessment of physical access for patients by the auditors**

In the qualitative phase of the study, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions. The quantitative results of the study showed that 20.5% (n=48) disagreed and 34.2% (n=80) agreed that this standard is assessed during relicensing inspection. There was significant agreement that safe access for the disabled was assessed by the auditors during relicensing inspections ( $M=4.33$ ,  $SD=2.160$ ),  $t(230) = 2.345$ ,  $p=.020$ . Overall, the quantitative results validated the qualitative findings on the assessment by the auditors of physical access for patients during relicensing inspection in keeping with the main theme that there is inadequate checking of the Patient Rights domain

during relicensing inspections and this finding is also related to Objective 1 of this study.

#### **6.2.4 Significant agreements PR7: The assessment of access to packages of service by the auditors**

The qualitative findings indicated that participants did not clearly understand this as a reference to R158. There were mixed responses to this question as participants articulated their own viewpoints as per their perceptions. The quantitative results of the study showed that 23.9% (n=56) disagreed and 27.4% (n=64) agreed that this standard is assessed during relicensing inspection. There was significant agreement that providing services that meet national guidelines for hospitals was assessed by the auditors during relicensing inspections ( $M=4.16$ ,  $SD=2.175$ ),  $t(231) = 1.096$ ,  $p=.274$ . Overall the quantitative results validated the qualitative findings on the assessment by the auditors of access to package of services during relicensing inspection in keeping with the main theme that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

#### **6.2.5 Significant agreements PR8: The assessment of complaints management process by the auditors**

Regarding the qualitative findings of the assessment of the complaints management process by the auditors as related to the Batho Pele principles and the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints and mainly expressed sentiments regarding their own hospital's complaints management process. The quantitative results of the study showed that 19.7% (n=46) disagreed and 29.1% (n=68) agreed that this standard is assessed during relicensing inspection. There was significant agreement that having a complaints management policy in place was assessed by the auditors during relicensing inspections ( $M=4.19$ ,  $SD=2.128$ ),  $t(231) = 1.358$ ,  $p=.176$ . Overall the

quantitative results validated the qualitative findings on the assessment by the auditors of the complaints management process during relicensing inspection in keeping with the main theme that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

#### **6.2.6 Significant disagreements PR2: The assessment of information to patients by the auditors**

Regarding the qualitative findings of the assessment of information to patients by the auditors as related to the Batho Pele principles and the Patient Rights domain, there were mixed responses to this question. The quantitative results of the study showed that 32.9% (n=77) disagreed and 14.5% (n=34) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that information to patients regarding their treatment was assessed by the auditors during relicensing inspections ( $M=3.36$ ,  $SD=2.099$ ),  $t(230) = -4.640$ ,  $p < .0005$ . Overall, the quantitative results validated the qualitative findings on the assessment by the auditors of information given to patients during relicensing inspection in keeping with the main theme, that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

#### **6.2.7 Significant disagreements PR4: The assessment of continuity of care by the Auditors**

Regarding the qualitative findings of the assessment of continuity of care by the auditors as related to the Batho Pele principles and the Patient Rights domain, there were mixed responses to this question. The quantitative results of the study showed that 38.9% (n=91) disagreed and 15.4% (n=36) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that continuity of care and giving patients information regarding referrals and specialists appointments was assessed by the

auditors during relicensing inspections ( $M=3.25$ ,  $SD=2.092$ ),  $t(232) = -5.480$ ,  $p < .0005$ . Overall, the quantitative results validated the qualitative findings on the assessment by the auditors of continuity of care for patients during relicensing inspection in keeping with the main theme that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

#### **6.2.8 Significant disagreements PR5: The assessment of reducing delays in care by the auditors**

Regarding the qualitative findings on the assessment of reducing delays in care by the auditors as related to the Batho Pele principles and the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions. The quantitative results of the study showed that 37.2% ( $n=87$ ) disagreed and 15.8% ( $n=37$ ) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that managing waiting times for patients in order to improve patient satisfaction and care was assessed by the auditors during relicensing inspections ( $M=3.31$ ,  $SD=1.977$ ),  $t(230) = -5.324$ ,  $p < .0005$ . Overall, the quantitative results validated the qualitative findings on the assessment by the auditors of reducing delays in care for patients during relicensing inspection, in keeping with the main theme that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

#### **6.2.9 Significant disagreements PR6: The assessment of emergency care by the auditors**

Regarding the qualitative responses for emergency care as related to the Batho Pele principles and the Patient Rights domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions. The quantitative results of the study showed that 35% ( $n=82$ ) disagreed and 12% ( $n=28$ ) agreed that this standard is assessed

during relicensing inspection. There is significant disagreement that treating and stabilising emergency patients before transfer if needed was assessed by the auditors during relicensing inspections ( $M=3.31$ ,  $SD=2.175$ ),  $t(231) = -4.859$ ,  $p < .0005$ . Overall the quantitative results validated the qualitative findings on the assessment by the auditors of emergency care given to patients during relicensing inspection, in keeping with the main theme that there is inadequate checking of the Patient Rights domain during relicensing inspections and this finding is also related to Objective 1 of this study.

### **6.3 RELIABILITY SCORES: PATIENT RIGHTS DOMAIN**

Regarding the reliability scores for the assessment of the Patient Rights domain by the auditors, Cronbach's alpha for Factor 1 items measured .944 and for Factor 2 items .921. There was significant disagreement for Factor 1 items ( $M=3.4948$ ,  $SD=1.92229$ ),  $t(233) = -4.020$ ,  $p < .0005$  and significant agreement for Factor 2 items ( $M=4.2286$ ,  $SD=1.98914$ ),  $t(233) = 1.758$ ,  $p = .080$ . The values for both alpha indicated that they are reliable scores. The reliability scores further validated and supported the main theme in that there was inadequate checking of the Patient Rights domain during relicensing inspection and is also related to Objective 1 of this study

### **6.4 COMPARISONS BETWEEN THE HOSPITALS: PATIENT RIGHTS DOMAIN**

The construct measures for the assessment by the auditors were compared for the four hospitals using the Kruskal Wallis Test. The results of the study showed that all of the measures in the assessment of the Patient Rights domain differed significantly across hospitals. The Kruskal Wallis Test further validated and supported the main and the sub-themes in the qualitative phase in that there was inadequate and inconsistent checking of the Patient Rights domain across all hospitals during relicensing inspections which is explained below. These findings are also related to Objective 1 of this study.

#### **6.4.1 Assessment by the auditors: Patient Rights domain (PRF1)**

The results of the study showed that there was a significant difference in the opinions of participants regarding the assessment of the Patient Rights domain across hospitals,  $\chi^2 (3) = 81.840$ ,  $p < .0005$ . There was agreement that more assessment across this domain was done at Hospital C and Hospital D compared to Hospital A and Hospital B and more at Hospital C compared to Hospital D.

#### **6.4.2 Assessment by the auditors: Patients Right domain (PRF2)**

The results of the study showed that there was a significant difference in the opinions of the participants regarding the assessment of the Patient Rights domain across hospitals,  $\chi^2 (3) = 83.287$ ,  $p < .0005$ . There was agreement that more assessment across this domain was done at Hospital A and Hospital C compared to Hospital B and Hospital D and more at Hospital C compared to Hospital A.

### **6.5 THE PARTICIPANTS RECOMMENDATIONS: AN AUDIT TOOL IS REQUIRED FOR RELICENSING INSPECTIONS**

The majority of participants in the quantitative phase, 61% ( $n=77$ ), further recommended a standardised clinical audit tool for relicensing inspections in their hospitals. These recommendations can be integrated with sub-theme two, 'there is no audit tool or structure for clinical relicensing inspection', and sub-theme three, 'a standardised clinical audit tool is required for relicensing inspections'. Recommendations from participants ranged from suggesting an audit tool to guide the audit, to rotation of the inspectors and consistency during the audits. Participants made valuable suggestions which are included in the recommendations in Chapter 9.

## **6.6 PATIENT RIGHTS DOMAIN: ASSESSMENT OF EVIDENCED BASED BEST PRACTICE STANDARDS THAT GUIDE NURSING PRACTICE**

In the qualitative phase of the study, participants agreed that evidence-based best practice policies and directives exist in their hospitals and that these policies guided their nursing practice. In the quantitative phase the results for best practice, Patient Rights domain, the mean scores in the quantitative results of the study as illustrated in Figure 5.13 in Chapter 5, showed that there was significant agreement by the staff that best practices for the Patient Rights domain existed in their hospitals ( $M=6.1585$ ,  $SD=.87635$ ),  $t(233)=37.678$ ,  $p<.0005$ . Factor 1 items included NCS standards 1-16 as these best practices support the Patient Rights domain in the form of policies or directives and are applied directly and indirectly to each patient. The reliability score, for Factor 1, as measured by Cronbach's alpha, was .961. These findings in the Patient Rights domain are also related to Objective 2 of this study.

## **6.7 REGRESSION ANALYSIS: BEST PRACTICE AND OUTCOMES ON THE PATIENT RIGHTS DOMAIN: FACTOR 1 (16 ITEMS) HAS AN INFLUENCE ON THE QUALITY OF PATIENT CARE**

The results of the study showed that best practices when applied in the Patient Rights domain accounts for 10% ( $R^2 = .100$ ) of the variance in quality of patient care,  $F(1,231) = 25.605$ ,  $p<.0005$ . This independent variable significantly predicted the quality of patient care,  $\beta = .268$ ,  $p<.0005$ . These results are also related to the Objective 2 of this study.

## **6.8 DOCUMENTATION REVIEW: PATIENT RIGHTS DOMAIN**

The documents reviewed of D1-17 in Table 5.3 and Table 5.4 in Chapter 5 further corroborated the findings of the qualitative and quantitative results of the Patient Rights domain in that evidence-based best practice standards exist at private hospitals in eThekweni district and this finding is related to the conceptual framework as well to Objective 2 of this study.



## **6.9 SUMMARY**

Overall the quantitative results corroborated and validated the findings in the qualitative phase of the study as related to the Patient Rights domain, to the NCS and the Batho Pele principles as well as to Objective 1 and Objective 2 of the study.

## **6.10 PATIENT CARE DOMAIN: ASSESSMENT BY AUDITORS AND THE EXISTENCE OF BEST PRACTICES**

### **Domain 2: Major Theme 2: Inadequate checking of the Patient Care domain during relicensing inspections**

There were mixed responses to the questions in the qualitative interview regarding the Patient Care domain. However, many participants articulated their own viewpoints and mainly expressed sentiments regarding their own evidence-based practices. In the quantitative phase of the study, the overall results of the Patient Care domain validated the results of the qualitative phase in which the main theme was that there is inadequate checking of the Patient Care domain during relicensing inspection. The mean total responses for assessment by the auditors that relates to the assessment of the Patient Care domain is depicted in Figure 5.11 in Chapter 5.

### **6.10.1 Merging and triangulation of the different data sources: Assessment of the Patient Care domain by the auditors**

Through the merging and integration of the different data sources the researcher was able to corroborate and validate the findings of the qualitative phase of the study of the Patient Care domain by also analysing the significant agreements and disagreements in the quantitative results discussed below. The discussions below further validated how the merging and integration of the different data sources corroborate the main theme in this domain as well its sub-themes in relationship to the study's objectives, the NCS, and the Batho Pele principles. The overall results of the assessment of

the Patient Care domain showed that the quantitative phase results validated the findings of the qualitative phase in which the main theme was that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection. Recommendations from the participants in the open-ended question in the quantitative phase of the study also suggested a standardised audit tool for relicensing inspection.

#### **6.10.2 Significant agreements, assessment by the auditors: Patient Care domain**

The following quantitative results showed significant agreements by some of the participants that the Patient Care domain is assessed during relicensing inspection which was related to Objective 1 and the conceptual framework of the study.

#### **PC11. Observation of the six international patient safety goals (#IPSG)**

Regarding the qualitative responses for the assessment of the international patient safety goals by the auditors as related to the Batho Pele principles and the Patient Care domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions. The results of the quantitative phase of the study showed that 23.1% (n=54) disagreed and 30.3% (n=71) agreed that this standard is assessed during relicensing inspection. There was significant agreement that observation of the six international patient safety goals was assessed by the auditors during relicensing inspections ( $M=4.26$ ,  $SD=2.211$ ),  $t(233) = 1.804$ ,  $p=.073$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **PC15. Maintenance of standard precautions to prevent cross infection**

Regarding the qualitative responses for the assessment of standard precautions by the auditors as related to the Batho Pele principles and the Patient Care domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions. The results of the quantitative study showed that 20.5% (n=48) disagreed and 32.1% (n=75) agreed that this standard is assessed during relicensing inspection. There was significant agreement that maintenance of standard precautions to prevent cross infection was assessed by the auditors during relicensing inspections ( $M=4.41$ ,  $SD=2.191$ ),  $t(233) = 2.835$ ,  $p = .005$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **PC16. Consistent application of hand hygiene principles**

Regarding the qualitative responses for the assessment of hand hygiene principles by the auditors as related to the Batho Pele principles and the Patient Care domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions regarding hand hygiene principles. The results of the quantitative study showed that 22.6% (n=53) disagreed and 32.9% (n=77) agreed that this standard is assessed during relicensing inspection. There was significant agreement that consistent application of hand hygiene principles was assessed by the auditors during relicensing inspections ( $M=4.54$ ,  $SD=2.171$ ),  $t(233) = 3.794$ ,  $p < .0005$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **PC17. Daily monitoring of environmental risks**

Regarding the qualitative responses for the assessment of monitoring environmental risks by the auditors as related to the Batho Pele principles and the Patient Care domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions regarding the monitoring of environmental risks. The results of the quantitative study showed that 23.1% (n=54) disagreed and 32.9% (n=77) agreed that this standard is assessed during relicensing inspection. There was significant agreement that daily monitoring of environmental risks was assessed by the auditors during relicensing inspections ( $M=4.37$ ,  $SD=2.107$ ),  $t(233)=2.668$ ,  $p=.008$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **PC22. Understanding of job descriptions**

Regarding the qualitative responses for the assessment of staff job descriptions by the auditors as related to the Batho Pele principles and the Patient Care domain, there were positive responses to this question regarding the assessment of job descriptions. The quantitative results of the study showed that 18.4% (n=43) disagreed and 32.1% (n=75) agreed that this standard is assessed during relicensing inspection. There was significant agreement that staff understanding of their job descriptions was assessed by the auditors during relicensing inspections ( $M=4.65$ ,  $SD=2.108$ ),  $t(233)=4.714$ ,  $p<.0005$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **PC23. Participation in induction and orientation programmes**

Regarding the qualitative responses for the assessment of induction and orientation programmes by the auditors as related to the Batho Pele principles and the Patient Care domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions regarding the assessment of induction and orientation programmes for staff. The quantitative results of the study showed that 20.5% (n=48) disagreed and 30.3% (n=71) agreed that this standard is assessed during relicensing inspection. There was significant agreement that participation engaged in induction and orientation programmes and was assessed by the auditors during relicensing inspections ( $M=4.41$ ,  $SD=2.152$ ),  $t(232) = 2.922$ ,  $p=.004$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **PC24. Participation in ward in-services training programmes**

Regarding the qualitative responses for the assessment of ward in-service training programmes for staff by the auditors as related to the Batho Pele principles and the Patient Care domain, there were mixed responses to this question as participants articulated their own viewpoints as per their perceptions regarding the assessment of training programmes for the staff. The quantitative results of the study showed that 23.5% (n=55) disagreed and 36.3% (n=85) agreed that this standard is assessed during relicensing inspection. There was significant agreement that participation in ward in-service training programmes was assessed by the auditors during relicensing inspections ( $M=4.36$ ,  $SD=2.094$ ),  $t(233) = 2.653$ ,  $p=.009$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

## **PC25. Knowledge of unit policies and procedures**

The qualitative responses for the knowledge of unit policies and procedures by the auditors as related to the Batho Pele principles and the Patient Care domain were mixed. The results in the quantitative phase of the study showed that 18.4% (n=43) disagreed and 34.6% (n=81) agreed that this standard is assessed during relicensing inspection. There was significant agreement that staff knowledge regarding unit policies and procedures was assessed by the auditors during relicensing inspections ( $M=4.56$ ,  $SD=2.148$ ),  $t(233) = 4.016$ ,  $p < .0005$ . Overall, the quantitative result validated the findings of the qualitative results of the study in that there is inadequate checking of the Patient Care domain by the auditors during relicensing inspection, in keeping with the main theme and is related to Objective 1 of this study.

### **6.10.3 Significant disagreements: Assessment by the auditors: Patient Care domain**

The qualitative responses for the Patient Care domain and its standards in relation to the NCS and the Batho Pele principles, were mixed. In the quantitative phase, the results showed many significant disagreements by some participants, that the Patient Care domain is assessed by the auditors during relicensing inspection, and these findings are related to main and sub-themes as well as to Objective 1 of this study. The quantitative results for significant disagreements are discussed in detail below.

## **PC1. Morse falls risk assessment tool for the prevention of falls**

The results of the study showed that 27.4% (n=64) disagreed and 17.5% (n=41) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the Morse falls risk assessment tool was assessed by the auditors during relicensing inspections ( $M=3.75$ ,  $SD=2.242$ ),  $t(233) = -1.691$ ,  $p = .092$ . Thus, the quantitative results validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

## **PC2. The Waterloo risk assessment tool for the prevention of pressure sores**

The results of the study showed that 27.4% (n=64) disagreed and 18.4% (n=43) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the Waterloo risk assessment tool was assessed by the auditors during relicensing inspections ( $M=3.76$ ,  $SD=2.275$ ),  $t(233) = -1.641$ ,  $p=.102$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

## **PC3. The Intravenous (IV) cannula bundle practice for the prevention of phlebitis**

The results of the study showed that 31.6% (n=74) disagreed and 18.4% (n=43) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the IV cannula bundle practice was assessed by the auditors during relicensing inspections ( $M=3.71$ ,  $SD=2.221$ ),  $t(233) = -1.972$ ,  $p=.0.50$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

## **PC4. Hang time for antibiotics**

The results of the study showed that 28.2% (n=66) disagreed and 19.7% (n=46) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that hangtime for antibiotics was assessed by the auditors during relicensing inspections ( $M=3.76$ ,  $SD=2.212$ ),  $t(233) = -1.625$ ,  $p=.105$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC5. Chlorhexidine prewash before surgery**

The results of the study showed that 33.3% (n=78) disagreed and 16.2% (n=38) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that chlorhexidine prewash before surgery was assessed by the auditors during relicensing inspections ( $M=3.55$ ,  $SD=2.157$ ),  $t(233) = -3.182$ ,  $p=.002$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC6. Bundle practice for the prevention of SSI**

The results of the study showed that 29.5% (n=69) disagreed and 19.2% (n=45) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of SSI was assessed by the auditors during relicensing inspections ( $M=3.65$ ,  $SD=2.157$ ),  $t(232) = -2.491$ ,  $p=.013$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC7. Bundle practice for the prevention of ventilator acquired pneumonia**

The results of the study showed that 32.1% (n=75) disagreed and 15.8% (n=37) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of ventilator acquired pneumonia was assessed by the auditors during relicensing inspections ( $M=3.57$ ,  $SD=2.116$ ),  $t(233) = -3.120$ ,  $p=.002$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.



#### **PC8. Bundle practice for the prevention of catheter associated UTI**

The results of the study showed that 32.5% (n=76) disagreed and 18.8% (n=44) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of catheter associated UTI was assessed by the auditors during relicensing inspections ( $M=3.60$ ,  $SD=2.181$ ),  $t(233) = -2.818$ ,  $p=.005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC9. Bundle practice for the prevention of central line arterial blood stream infection**

The results of the study showed that 34.6% (n=81) disagreed and 16.7% (n=39) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that bundle practice for the prevention of central line arterial blood stream infection was assessed by the auditors during relicensing inspections ( $M=3.53$ ,  $SD=2.143$ ),  $t(233) = -3.325$ ,  $p=.001$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC10. Observation of the 5 Rs of medication administration**

The results of the study showed that 29.1% (n=68) disagreed and 15.0% (n=35) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that observation of the 5 Rs of medication administration was assessed by the auditors during relicensing inspections ( $M=3.79$ ,  $SD=2.276$ ),  $t(233) = -1.436$ ,  $p=.152$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC12. Change of shift report using situation, background, assessment and recommendation (SBAR)**

The results of the study showed that 35% (n=82) disagreed and 17.9% (n=42) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that SBAR was assessed by the auditors during relicensing inspections ( $M=3.49$ ,  $SD=2.093$ ),  $t(233) = -3.717$ ,  $p < .0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC13. Adequate care and handling of sharps**

The results of the study showed that 31.2% (n=73) disagreed and 20.5% (n=48) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that adequate care and handling of sharps was assessed by the auditors during relicensing inspections ( $M=3.79$ ,  $SD=2.260$ ),  $t(233) = -1.449$ ,  $p = .149$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC14. Proper care and management of medical waste**

The results of the study showed that 28.6% (n=67) disagreed and 22.2% (n=52) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the proper care and management of medical waste was assessed by the auditors during relicensing inspections ( $M=3.91$ ,  $SD=2.245$ ),  $t(233) = -6.41$ ,  $p = .522$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC18. Safe administration of blood and blood products**

The results of the study showed that 32.9% (n=77) disagreed and 14.1% (n=33) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the safe administration of blood and

blood products was assessed by the auditors during relicensing inspections ( $M=3.45$ ,  $SD=2.127$ ),  $t(232) = -3.942$ ,  $p < .0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC19. Timeous reporting of adverse events**

The results of the study showed that 30.3% ( $n=71$ ) disagreed and 21.4% ( $n=50$ ) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the timeous reporting of adverse events was assessed by the auditors during relicensing inspections ( $M=3.61$ ,  $SD=2.175$ ),  $t(232) = -2.711$ ,  $p = .007$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC20. The following of time-out process for all invasive and surgical procedures**

The results of the study showed that 31.6% ( $n=74$ ) disagreed and 20.5% ( $n=48$ ) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that the time-out process for invasive and surgical procedures was assessed by the auditors during relicensing inspections ( $M=3.48$ ,  $SD=2.111$ ),  $t(232) = -3.755$ ,  $p < .0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **PC21. Adherence to inter-hospital and inter-departmental transfer processes**

The results of the study showed that 34.6% ( $n=81$ ) disagreed and 20.5% ( $n=48$ ) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that adherence to inter-hospital and inter-departmental transfer processes was assessed by the auditors during relicensing inspections ( $M=3.44$ ,  $SD=2.104$ ),  $t(233) = -4.101$ ,  $p < .0005$ . Thus,

the quantitative result validated the findings of the qualitative phase of the study in relation to the main and sub-themes in this section of the study.

#### **6.10.4 Reliability scores: Patient Care domain**

The reliability score, for Factor 1, as measured by Cronbach's alpha, was .991 and for Factor 2 was .973. There was significant disagreement to assessment of patient care Factor 1 ( $M=3.6387$ ,  $SD=2.04107$ ),  $t(233) = -2.708$ ,  $p=.007$  and significant agreement to assessment of patient care Factor 2 ( $M=4.4709$ ,  $SD=1.98305$ ),  $t(233) = 3.632$ ,  $p<.0005$ . The values for both alpha indicated that they are reliable scores. The reliability scores further validated and corroborated the main theme that there is inadequate checking of the Patient Care domain during relicensing inspection and is related to Objective 1 of the study.

#### **6.10.5 Regression analysis: Best practice and its outcomes on the Patient Care domain: Factor 1 (15 items) has an influence on the quality of patient care**

The results of the study showed that best practices when applied in the Patient Care domain accounts for 10% ( $R^2 = .065$ ) of the variance in quality of patient care,  $F(1,231) = 16.139$ ,  $p<.0005$ . This independent variable significantly predicts the quality of patient care,  $\beta = .297$ ,  $p<.0005$ . This finding is related to Objective 2 of this study.

#### **6.10.6 Regression Analysis: Best Practice and its outcomes on the Patient Care domain: Factor 2 (10 items) has an influence on the quality of patient care**

The results of the study showed that best practices when applied in the Patient Care domain accounts for 10% ( $R^2 = .119$ ) of the variance in quality of patient care,  $F(1,231) = 31.300$ ,  $p<.0005$ . This independent variable significantly predicted the quality of patient care,  $\beta = .333$ ,  $p<.0005$ . This finding is related to Objective 2 of this study.

## **6.11 FINDINGS FROM ASSESSMENT OF QUALITY OF PATIENT CARE**

Regarding participants' responses to rate their units on the quality of patient care, the results of the study showed that participants who responded held a high opinion of the quality of patient care in their units ( $M= 4.40$ ,  $SD=.742$ ),  $t(232) = 28.766$ ,  $p < .0005$  as illustrated in Figure 5.16, in Chapter 5. This finding is related to Objective 2 of this study.

## **6.12 FINDINGS FROM PARTICIPANTS REGARDING THE REPORTING STRUCTURE FOR ADVERSE EVENTS**

Of participants' responses to when a mistake is made and discovered and corrected before it affects the patient and how often is it reported, 57.3% indicated that they reported a corrected mistake as illustrated in Figure 5.17, Chapter 5. A Chi-square goodness-of-fit test was applied to test if any of the options selected is significantly more than the others. The results of the study showed that a significant number indicated that they reported a corrected mistake most of the time (57, 24.4%) or always (134, 57.3%),  $\chi^2(4) = 243.302$ ,  $p < .0005$ . This finding supported the quality initiatives and its outcomes for patients and users of the service and is related to Objective 2 of this study

## **6.13 FINDINGS FROM PARTICIPANTS' ASSESSMENT OF INCIDENT REPORTING**

Regarding participants' responses to incident reporting, the results showed that 35.9% ( $n=84$ ) of the participants reported between 1-2 incidences in the last 12 months and equally the same number indicated that no incidents were reported 36.3% ( $n=85$ ) as illustrated in Figure 5.18, Chapter 5. This finding related to objective 2 of the study. A Chi-Square goodness-of-fit test was applied to test if any of the options selected is significantly more than the others. The results of the study showed that participants reported the following number of incidents in the past 12 months, none ( $n=85$ , 36.3%), 1-2 ( $n=84$ , 35.9%), 3-5 ( $n=29$ , 12.4%), 6-10 ( $n=12$ , 5.1%) >10 ( $n=20$ , 8.5%),  $\chi^2(4)$

=110.565,  $p < .0005$ . This finding supported the quality initiatives and its outcomes for patients and users of the service and is related to Objective 2 of this study.

#### **6.14 COMPARISONS BETWEEN THE HOSPITALS: PATIENT CARE DOMAIN**

The construct measures for the assessment by the auditors were compared for the four hospitals, using the Kruskal Wallis Test. The results of the study showed that all of the measures in the assessment of the patients care domain differed significantly across hospitals. The test further validated and corroborated the main theme that there is inadequate checking of the Patient Care domain during relicensing inspection and the findings are related to Objective 1 of this study.

##### **Assessment by the auditors: Patients Care domain (PCF1)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Patient Care domain across hospitals,  $\chi^2(3) = 85.482$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital C and Hospital D compared to Hospital A and Hospital B and more at Hospital C compared to Hospital D.

##### **Assessment by the auditors: Patients Care domain (PCF2)**

The results of the study showed that there was a significant difference in the opinions of the assessment of the Patient Care domain across hospitals,  $\chi^2(3) = 96.113$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital A and Hospital C compared to Hospital D and Hospital B and more at Hospital A compared to Hospital C.

## **6.15 THE PARTICIPANTS RECOMMENDATIONS**

Participants' recommendations in relation to the open-ended question in the quantitative phase were that every aspect of patient care must be checked. There were many best practice recommendations from the participants which are included in the recommendations in Chapter 9.

## **6.16 DOCUMENTATION REVIEW: RELEVANCE OF POLICIES AND PROCEDURES TO THE PATIENT CARE DOMAIN**

The documents reviewed (D18-42) in Table 5.13, Chapter 5 corroborated the findings of the qualitative and quantitative results of the Patient Care domain that evidence-based best practice exists at the participating private hospitals in eThekweni district and the finding also related to the NCS and Batho Pele principles in the form of directives and policies. The standards of the NCS and Batho Pele principles are mostly based in policy guidelines. The policies are taught to staff for ongoing improvement of the standard of care rendered to patients. In both the phases of the study participants notably referred to policies which could not be validated during the study. These documents that participants identified as related to quality and patient safety were validated during the third documentation review phase. The findings also related to Objective 2 of this study.

## **6.17 SUMMARY**

Overall the quantitative results corroborated and validated the findings in the qualitative phase of the study as related to the Patient Care domain, to the NCS and the Batho Pele principles as well as to Objective 1 and Objective 2 of the study.

## **6.18 CLINICAL SUPPORT SERVICES DOMAIN: ASSESSMENT BY AUDITORS AND THE EXISTENCE OF BEST PRACTICES**

### **Domain 3: Major Theme 3: There is inadequate checking of the Clinical Support Services domain during relicensing inspections**

Participants agreed that a few and not all the support services are audited during relicensing inspections and expressed their concerns regarding those not audited. They further acknowledged that Clinical Support Services are key to providing quality and safe care to their patients. One sub-theme that emerged under this major theme during the interview was that there is inconsistent checking of the Clinical Support Services domain during relicensing inspections.

#### **6.18.1 Merging and triangulation of the different data sources: Assessment by the auditors: Clinical Support Services domain**

The overall results of the Clinical Support Services domain showed that the quantitative phase validated the findings of the qualitative phase of the study with most participants in disagreement that the Clinical Support Services domain is audited during relicensing inspections. There was significant disagreement regarding assessment of support services by the auditors ( $M=3.4585$ ,  $SD=1.83273$ ),  $t(233)=-4.520$ ,  $p<.0005$ . The discussions below in which the different data sources were merged and integrated further validated the findings in the main and sub-theme of the qualitative phase of the study, in that there is inadequate checking of the Clinical Support Services domain during relicensing inspections. The significant agreements and disagreements are discussed below. The results for the mean responses in the quantitative phase of the study are illustrated in Figure 5.12, Chapter 5. These results are related to Objective 1 of the study.



### **6.18.2 Significant agreements and disagreements: Assessment by the auditors: Clinical Support Services domain**

#### **SS1. Checking of pharmacy related issues in the unit**

In the qualitative phase of the study, the major theme that arose was that some aspects of the support services are audited during relicensing inspections. There were mixed responses to the assessment of pharmacy related issues in the unit, however many participants articulated their own viewpoints and mainly expressed sentiments regarding their own hospital based practices. The quantitative results of the study showed that 32.9% (n=77) disagreed and 17.1% (n=40) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that checking of pharmacy related issues in the unit was assessed by the auditors during relicensing inspections ( $M=3.21$ ,  $SD=2.074$ ),  $t(233) = -5.863$ ,  $p < .0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

#### **SS2. Checking of diagnostic services in the unit**

Regarding diagnostic services, participants agreed that this is an important component of quality and patient safety, however, it is not audited during relicensing inspections. The quantitative results of the study showed that 30.8% (n=72) disagreed and 19.7% (n=46) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that checking of diagnostic services in the unit was assessed by the auditors during relicensing inspections ( $M=3.41$ ,  $SD=2.020$ ),  $t(232) = -4.444$ ,  $p < .0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

#### **SS3. Checking of health technology services in the unit**

Regarding health technology services, participants agreed that this is an important component of quality and patient safety, but is seldom audited during relicensing inspections. The quantitative results of the study showed

that 29.1% (n=68) disagreed and 10.2% (n=45) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that checking of health technology services in the unit was assessed by the auditors during relicensing inspections ( $M=3.47$ ,  $SD=2.038$ ),  $t(233)=-4.009$ ,  $p<.0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

#### **SS4. Checking of sterilisation services in the unit**

Participants agreed that this is an important component of quality and patient safety, but is not audited during relicensing inspections. The quantitative results of the study showed that 30.3% (n=71) disagreed and 18.8% (n=44) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that sterilisation services in the unit was assessed by the auditors during relicensing inspections ( $M=3.43$ ,  $SD=2.145$ ),  $t(232)=-4.032$ ,  $p<.0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

#### **SS5. Checking of mortuary services in the unit**

Participants agreed that this is an important component of quality and patient safety, but is not audited during relicensing inspections. The results of the study showed that 30.8% (n=72) disagreed and 11.1% (n=26) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that mortuary services in the unit was assessed by the auditors during relicensing inspections ( $M=2.87$ ,  $SD=1.817$ ),  $t(224)=-9.321$ ,  $p<.0005$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

#### **SS6. Checking of efficiency management services in the unit**

Participants agreed that this is an important component of quality and patient safety, but is not audited during relicensing inspections. The quantitative results of the study showed that 19.2% (n=45) disagreed and 32.1% (n=75)

agreed that this standard is assessed during relicensing inspection. There was significant agreement that efficiency management services in the unit were assessed by the auditors during relicensing inspections ( $M=4.20$ ,  $SD=2.142$ ),  $t(233) = -1.404$ ,  $p=.162$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

#### **SS7. Checking of therapeutic and support services in the unit**

Participants agreed that this is an important component of quality and patient safety, but is not audited during relicensing inspections. The results of the study showed that 27.8% ( $n=65$ ) disagreed and 22.6% ( $n=53$ ) agreed that this standard is assessed during relicensing inspection. There was significant disagreement that therapeutic and support services in the unit were assessed by the auditors during relicensing inspections ( $M=3.59$ ,  $SD=2.070$ ),  $t(232) = -3.038$ ,  $p=.003$ . Thus, the quantitative result validated the findings of the qualitative phase of the study.

### **6.19 RELIABILITY SCORES: CLINICAL SUPPORT SERVICES DOMAIN**

The reliability score for Factor 1, Cronbach's alpha, measured .961. There was significant disagreement regarding the assessment of support services by the auditors ( $M=3.4585$ ,  $SD=1.83273$ ),  $t(233) = -4.520$ ,  $p<.0005$ . F. This finding is related to Objective 1 of this study.

The validity and reliability of scores for the assessment of best practice, Support Services domain by the nursing staff showed a reliability score for Factor 1 of Cronbach's alpha .889. There was significant agreement that this best practice exists in the hospitals ( $M=6.1008$ ,  $SD=.85147$ ),  $t(233) = 37.742$ ,  $p= <.0005$ . This finding is related to Objective 2 of this study.

## **6.20 BEST PRACTICE ON THE CLINICAL SUPPORT SERVICES DOMAIN FACTOR 1 (7 ITEMS) HAS AN INFLUENCE ON THE QUALITY OF PATIENT CARE**

The results of the study showed that best practices when applied in the Clinical Support Services domain accounts for 10% ( $R^2 = .105$ ) of the variance in quality of patient care,  $F(1,231) = 27.229$ ,  $p < .0005$ . This independent variable significantly predicts the quality of patient care,  $\beta = .283$ ,  $p < .0005$ . This finding is related to Objective 2 of this study.

## **6.21 COMPARISONS BETWEEN THE HOSPITALS: CLINICAL SUPPORT SERVICES DOMAIN**

The construct measures for the assessment by the auditors were compared for the four hospitals using the Kruskal Wallis Test. The results of the study showed that all of the measures differed significantly across hospitals. The results of the study showed that there was a significant difference in the opinions of the assessment of the Clinical Support Services domain across hospitals,  $\chi^2(3) = 71.005$ ,  $p < .0005$ . There is agreement that more assessment across this domain was done at Hospital A and Hospital C compared to Hospital B and Hospital D and more at Hospital C compared to Hospital A.

## **6.22 THE PARTICIPANTS' RECOMMENDATIONS**

Recommendations for improvement from participants in this section were related to health technology services, pharmaceutical services and sterilisation services. The staff made valuable suggestions which will be included in the recommendations in Chapter 9.

## **6.23 SUPPORT SERVICES DOMAIN: DOCUMENTATION REVIEW**

The documents reviewed (D43-49) in Table 5.14, Chapter 5, corroborated the findings of the qualitative and quantitative results of the Clinical Support Services domain that evidence-based best practice standards exist at private

hospitals in eThekweni district. This finding is also related to the NCS and Batho Pele principles in the form of directives and policies and is related to Objective 2 of this study.

## **6.24 SUMMARY OF THE CHAPTER**

The mixing and merging of the results of the study in this chapter enabled the researcher to corroborate, validate or refute the findings of the study. Overall the quantitative results corroborated and validated the findings in the qualitative phase of the study as related to the Patient Rights, Patient Care and Support Services domains, to the NCS and the Batho Pele principles as well as to Objective 1 and Objective 2 of the study. The next chapter discusses the development of a proposed audit tool for relicensing inspection, the last and final objective of the study.

# **CHAPTER 7: A PROPOSED AUDIT TOOL FOR CLINICAL RELICENSING INSPECTIONS FOR PRIVATE HOSPITALS IN ETHEKWINI DISTRICT**

## **7.1 INTRODUCTION**

The first objective of the study was to assess nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections for private hospitals in eThekweni district, in relation to the clinical domains of the NCS and the Batho Pele principles. The second objective was to also assess the evidence-based best practice standards that exist in selected private hospitals in eThekweni district and the outcomes for patients and users of the service. The results of the study showed that the perceptions of the staff regarding the current relicensing audits of Patient Rights, Patient Care and Support Services domains are inadequately checked during relicensing inspections. There are various inconsistencies with the use of the national audit tool and therefore a common definition of quality and patient safety has not been attained at the selected private hospitals in eThekweni district. The third and final objective was to develop an audit tool based on the findings of the study. The findings of both the qualitative and quantitative phases led to development of an audit tool in this chapter, which the researcher proposes for use during relicensing inspections within private hospitals in eThekweni district. The development of the tool was guided by the findings and the conceptual framework chosen for the study. The results of the study's findings in Chapter 5 have shown that there are areas in the relicensing process where participants strongly agreed and disagreed with the current relicensing audit procedure. The goal of developing a standardised clinical audit tool is to ensure that relicensing audits are guided towards the national quality policy framework and take into account the first three clinical domains of NCS and Batho Pele principles of South Africa. These are the domains of Patient Rights, Patient Care and Support Services as well as the Batho Pele

principles and best practice standards that exist in private hospitals in eThekweni district.

## 7.2 THE CONCEPTS USED TO DEVELOP THE CLINICAL AUDIT TOOL

The study's findings, in relation to the first two objectives and the conceptual model that was used in the study, highlighted the concepts to be included in the development of the audit tool (Figure 7.1). The proposed audit tool is depicted in Tables 7.1, 7.2, and 7.3 below.

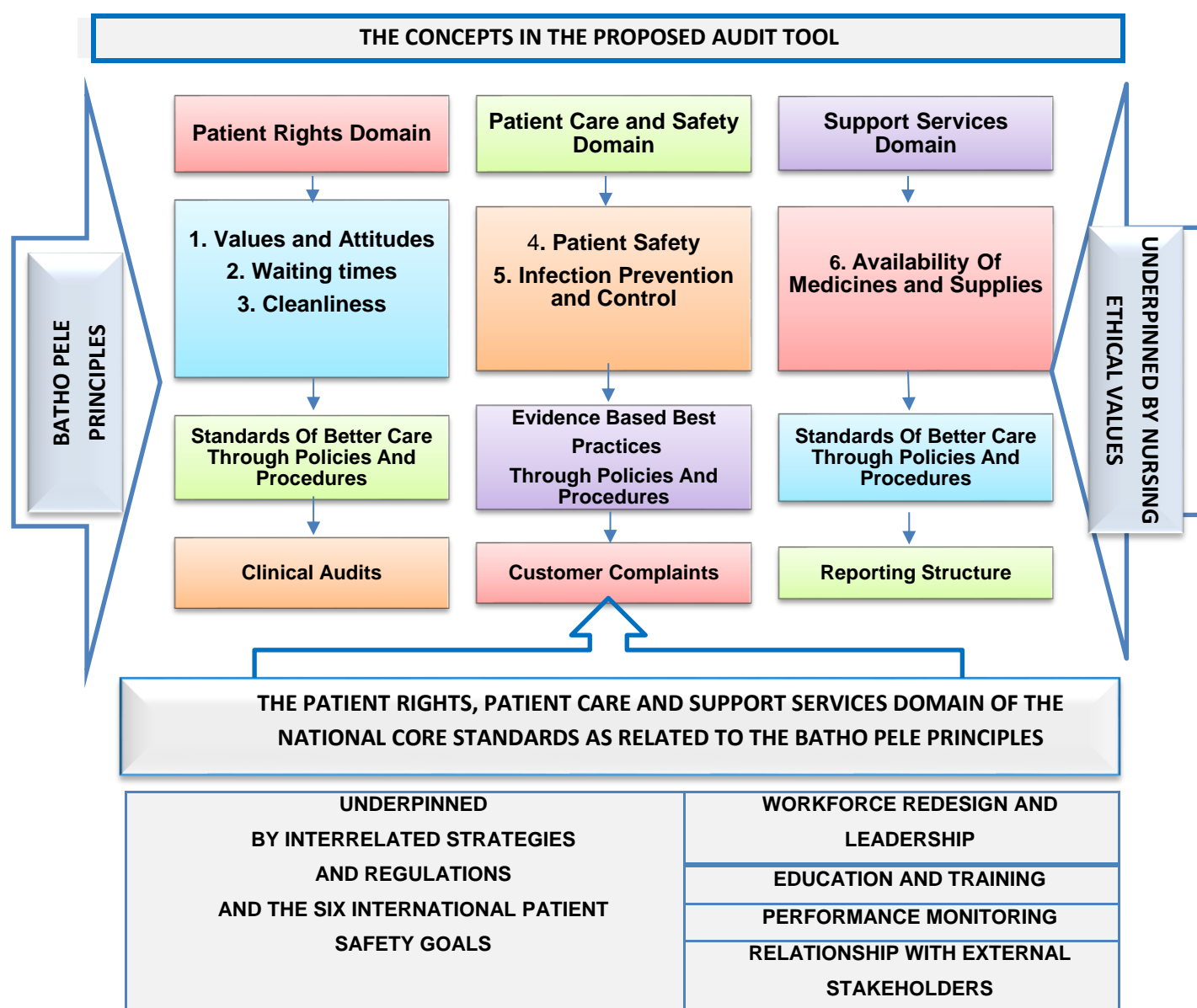


Figure 7.1: The concepts in the proposed audit tool

**Table 7.1: Patient Rights domain: The proposed Clinical Audit Tool for relicensing inspection for private hospitals in eThekweni district**

<b>1. Patient Rights domain</b>	<b>Patient Rights upheld, including getting access to needed care and to respectful, informed and dignified attention in an acceptable and hygienic environment, seen from the point of view of the patient, in accordance with Batho Pele principles and the Patient Rights Charter.</b>				<b>Score</b>
<b>Sub-domain</b>	<b>Standard</b>	<b>Criteria</b>	<b>Measure</b>	<b>Outcome</b>	<b>Score</b>
<b>1.1 Respect and Dignity</b>	Staff treat patients with care and respect, with consideration for patient privacy and choice and allow patients to express dissatisfaction.	Empathy, privacy, care of the vulnerable, patient satisfaction, environment of care, food and water. Display Batho Pele, Patient Charter, Patients' rights and responsibilities. Mission, Vision and Objectives. Assess confidentiality related to POPI act.	Policy Procedures Directives Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A-E C N-C
<b>1.2 Information to Patients</b>	Patients are given the information they need regarding their treatment, their care after discharge, and their participation in research where relevant.	Patients' rights and responsibility explained, informed consent, discharge summary reports, research approval, information to patient's assessed adequate signage, visiting hours, and nurses' identification.	Policy Procedures Directives Staff Education Direct Access Patient Education	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A-E C N-C
<b>1.3 Physical Access</b>	Services are easy and safe to access including for the disabled.	Easy and safe access to hospital, access for disabled, hearing and visually impaired, ambulation of disabled persons.	Policy Procedures Directives Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C
<b>1.4 Continuity of Care</b>	Patients are given information about referrals and specialist bookings.	Referral systems, emergency care, resources are adequate. Staff is BLS trained.	Policy Procedures Directives Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C



Sub-domain	Standard	Criteria	Measure	Outcome	Score
<b>1.5 Reducing Delays in Care.</b>	Waiting times for bed placements, outpatients and procedures are managed to improve patient satisfaction and care, and triage of patients ascertain their priority levels of care.	Reduce-waiting times, receive medications timeously, treatment according nature and severity of condition, efficient filing system, waiting lists for elective procedures kept short.	Policy Procedures Directives Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C
<b>1.6 Emergency Care.</b>	Emergency patients are attended to, examined and stabilised appropriately and then referred or transferred if needed.	Effective handover, guidelines for stabilising patients at A-E units, hospital and ambulance diversions to minimise impact.	Policy Procedures Directives Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C
<b>1.7 Access to Package of Service.</b>	Services provided meet with national guidelines or licensing specifications.	All services meet the guidelines of R158.	Policy Procedures Directives Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C
<b>1.8 Complaints Management.</b>	Patients who wish to complain about poor service are helped to do so and their concerns are properly addressed and used to improve the service.	Complaints management, addressed within timescales, complaints used to improve quality of service. Complaints are screened to identify and manage adverse events.	Policy Procedures Directives Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C

**Table 7.2: Patient Safety, Clinical Governance and Clinical Care domain: The proposed Clinical Audit Tool for relicensing inspection for private hospitals in eThekweni district**

<b>2. Patient Safety Clinical Governance and Clinical Care domain</b>	<b>The Patient Safety, Clinical Governance and Clinical Care domain covers how to ensure quality nursing and clinical care and ethical practice; reduce unintended harm to healthcare users or patients in identified cases of greater clinical risk; prevent or manage problems or adverse events, including healthcare-associated infections; and support any affected patients or staff.</b>				
<b>Sub-domain</b>	<b>Standard</b>	<b>Criteria</b>	<b>Measure</b>	<b>Outcome</b>	<b>Score</b>
<b>2.1 Patient Care.</b>	Patients receive care and treatment that follows nursing protocols, EBP and meets basic needs and contributes to their recovery.	Processes are in place to ensure basic and EBP care with continuous quality improvement.	Policy Procedures Staff Education Direct Access Score Cards	E = 0%- 20% D = 20%- 39% C = 40%- 59% B = 60%- 79% A = 80%-100% Compliant Non-compliant	A- E C N-C
<b>2.2 Clinical Management for Improved Outcomes.</b>	Care provided contributes positively to national priorities, including the United Nations Millennium Development Goals for maternal and child health, HIV and Tuberculosis.	Processes are in place to ensure basic and EBP care with continuous quality improvement.	Policy Procedures Staff Education Direct Access Score Cards	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-compliant	A- E C N-C
<b>2.3 Clinical Leadership.</b>	Doctors, nurses and other health professionals constantly work to improve the care they provide through proper support systems.	Appropriate HOD's, job description with lines of accountability. Formal supervision programme. Quality Committee in place.	Policy Procedures Staff Education Direct Access Minutes of meetings Terms of reference	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-Compliant	A- E C N-C

Sub-domain	Standard	Criteria	Measure	Outcome	Score
<b>2.4 Clinical Risks.</b>	Clinical risk identification and analysis takes place in every ward to prevent patient safety incidents.	Clinical risk identification in every ward, clinical risk policy and protocol, monitoring systems, for high-risk patients, mentally ill patients.	Policy Procedures Staff Education Direct Access Score Cards	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-compliant	A- E C N-C
<b>2.5 Adverse Events.</b>	Adverse events or patient safety incidents are promptly identified and managed to minimise patient harm and suffering.	Adverse events policy and procedure, incident reporting and monitoring system, control and corrective actions, adverse events are monitored against set targets.	Policy Procedures Staff Education Direct Access Score Cards Ethics and M&M Forums Minutes of meetings	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-compliant	A- E C N-C
<b>2.6 Infection Prevention and control.</b>	An Infection Prevention and Control Programme is in place to reduce healthcare-associated infections.	Infection prevention and control policy to manage HAIs. A qualified health professional is in charge. A formal surveillance, monitoring and reporting system is in place to reduce infection rates. Notifiable diseases process is in place. EBP to prevent HAI. Isolation Procedures. Sharps handling, environmental monitoring, respiratory/TB conditions. Preparation of feeds, hand hygiene and waste management.	Policy Procedures Staff Education Direct Access Score Cards Minutes and Terms of Reference of committees Environmental monitoring records Statistics on common healthcare-associated infections demonstrate that they are in line with acceptable benchmarks	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-compliant	A- E C N-C

**Table 7.3: Clinical Support Services domain: The proposed Clinical Audit Tool for relicensing inspection for private hospitals in eThekweni district**

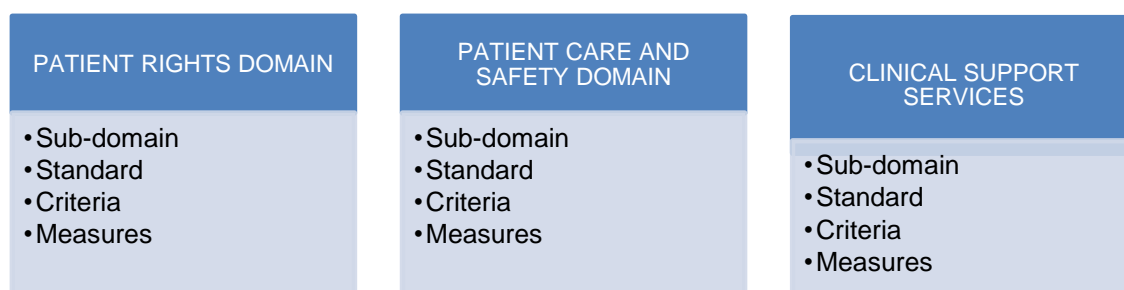
3. The Clinical Support Services domain	The Clinical Support Services domain covers specific services essential in the provision of clinical care and includes the timely availability of medicines and efficient provision of Diagnostic, therapeutic and other clinical support services and necessary medical technology, as well as systems to monitor the efficiency of the care provided to patients.				
Sub-domain	Standard	Criteria	Measure	Outcome	Score
<b>3.1 Pharmaceutical services.</b>	Pharmaceutical services are licensed and are supervised by a registered pharmacist. Stock levels and storage of medicines and medical supplies are managed appropriately. Reactions to drugs or severe side effects are reported and the patient is properly cared for.	The pharmacy is licensed by National Department of Health, registered by SAPC. Medicines are stored in compliance with the Pharmacy Act, Medicines and Related Substances Act, and relevant rules and regulations Responsible pharmacist. Medical supplies required to care for patients are in stock. Access to medicines during operating hours and after hours. Advice is given to patients to adhere to therapy. Prescribing complies with applicable guidelines and policies, Schedule 5 and 6 medicines are controlled and distributed in accordance with the Medicines and Related Substances Act.	Policy Procedures Staff Education Direct Access Minutes of meetings Environmental monitoring Records Critical stock levels lists Records PTC with terms of reference. Recommendations on Antibiotic usage-Anti microbial stewardship program.	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-compliant	A- E C N-C
<b>3.2 Diagnostic Services.</b>	X-ray services are available and provide good quality reports or results within agreed timescales, and staff are protected from unintentional exposure.	Quality and timeous services from Laboratory and X-rays. Staff and patients are protected from unnecessary exposure. (PPE's). Films and reagents are stored and disposed of according to guidelines.	Policy Procedures Staff Education Direct Access Environmental monitoring Staff Medicals Radiation licensing records Equipment checklists	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A = 80%-100% Compliant Non-compliant	A- E C N-C

Sub-domain	Standard	Criteria	Measure	Outcome	Score
<b>3.3 Therapeutic Services.</b>	Blood for transfusion is available within an acceptable time. Rehabilitation and social support services are available where needed by the respective/relevant, professional staff.	Blood and blood products are available to support care. Rehabilitation and social support services are available Patient treatment is holistic and includes comprehensive multi-disciplinary therapeutic programmes. Patients requiring social support are assessed according to protocols.	Policy Procedures Staff Education Direct Access Equipment checklists	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A= 80%-100% Compliant Non-compliant	A- E C N-C
<b>3.4 Health Technology Services.</b>	Medical equipment for safe and effective patient care is available and functional. Staff are trained in the correct use of medical equipment.	Medical equipment meets minimum requirements for the appropriate level of care. Staff are trained in the correct use of medical equipment. Medical devices are maintained to ensure safety and functionality. Critical devices are regularly serviced.	Policy Procedures Staff Education Direct Access Equipment checklists PPM programmes	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A= 80%-100% Compliant Non-compliant	A-E C N-C
<b>3.5 Sterilization Services.</b>	Decontamination and sterilisation services are available and effective.	System is in place for decontamination of surgical instruments. Suitably qualified staff manages the sterilisation department. Clear lines of accountability exist for the decontamination cycle. Sterilisation equipment meets legislative requirements. Biological and processing tests. All sterilisation failures are monitored.	Policy Procedures Staff Education Direct Access Equipment checklists PPM programmes Biological and Processing test records	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A= 80%-100% Compliant Non-compliant	A-E C N-C
<b>3.6 Mortuary Services.</b>	There is a process for the care and removal of the dead.	Policies and procedures guide all aspects of storage, removal and transportation of bodies.	Policy Procedures Staff Education Direct Access	E = 0%-20% D = 20%-39% C = 40%-59% B = 60%-79% A= 80%-100% Compliant Non-compliant	A- E C N-C
<b>3.7 Efficiency management.</b>	Clinical efficient and cost effective safe, quality patient care is rendered.	Effective and efficient case management systems are in place. Integration of cost effective care.	Policy Procedures Staff Education Direct Access	Compliant Non-Compliant	C N-C

## 7.3 THE DEVELOPMENT OF A CLINICAL AUDIT TOOL

### 7.3.1 Structure of the core clinical domains

The development of the audit tool is a modified version based on the NCS and the Batho Pele principles. The researcher proceeded with development of an audit tool by highlighting the concepts to be included in the tool as illustrated in Figure 7.1. The concepts relate to the clinical domains of the NCS and the Batho Pele principles and also to those that were identified by the participants in the study. The proposed clinical audit tool is outlined in Tables 7.1, 7.2, and 7.3 above, for clinical relicensing inspections of private hospitals in eThekweni district. Each table represents a domain, sub-domain, standard, criteria and measures as depicted in Figure 7.2. Furthermore, the researcher outlined a sample checklist (Table 7.4) within which each sub-domain standard and criteria may be assessed during relicensing inspection. The researcher also proposes the assessment of best practice policies, procedures and directives in conjunction with the assessment of the six fast track standards as a vital measure of compliance during relicensing inspections as depicted in Tables 5.11, 5.12, 5.13, 5.14, and 5.15 in Chapter 5. Each standard in the three clinical domains meets the principles of universality (applicable to all units), relevance (will include critical elements relevant to quality and patient safety), validity and reliability (involve objective measurement) and be logically applied (through direct observations and direct analysis of records) and be based on the NCS and the Batho Pele principles of South Africa (Department of Health 2011: 13a).



**Figure 7.2: Structure of the core clinical domains**

### 7.3.2 Explanation of the domains and the sub-domains of the audit tool

Each sub-domain has a set of standards which defines what is expected to be delivered in terms of quality care and best practices. Linked to each standard are a number of auditable criteria to which is attached a risk rating score indicating whether the organisations are compliant (C) or non-compliant (NC) to the standard. The criteria are all measurable and achievable as reflected in the measures, through direct observation (DO) or direct access (DA). The structure of the domains and the sub-domains are depicted in Figure 7.3.

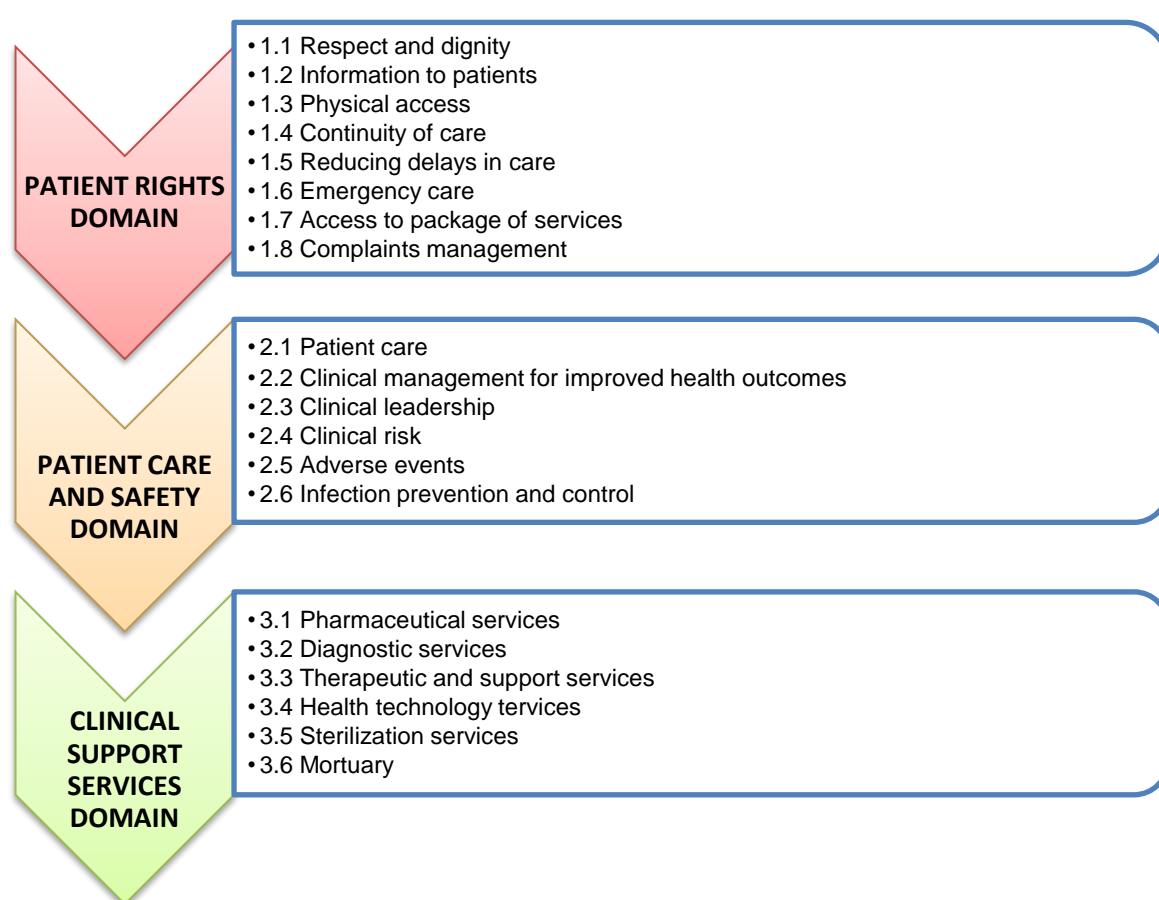


Figure 7.3: Structure of the domains and sub-domains.

### **7.3.3 Explanation of the core clinical domains**

#### **Domain 1: Patient Rights**

The domain of Patient Rights sets out what a hospital or clinic must do to make sure that patients are respected and their rights upheld, including getting access to needed care and to respectful, informed and dignified attention in an acceptable and hygienic environment, seen from the point of view of the patient, in accordance with Batho Pele Principles and the Patient Rights Charter (Department of Health 2011: 11a).

#### **Domain 2: Patient Safety, Clinical Governance and Care**

The Patient Safety, Clinical Governance and Clinical Care domain covers how to ensure quality nursing and clinical care and ethical practice, reduce unintended harm to healthcare users or patients in identified cases of greater clinical risk, prevent or manage problems or adverse events including healthcare-associated infections, and support any affected patients or staff (Department of Health 2011: 11a).

#### **Domain 3: Clinical Support Services**

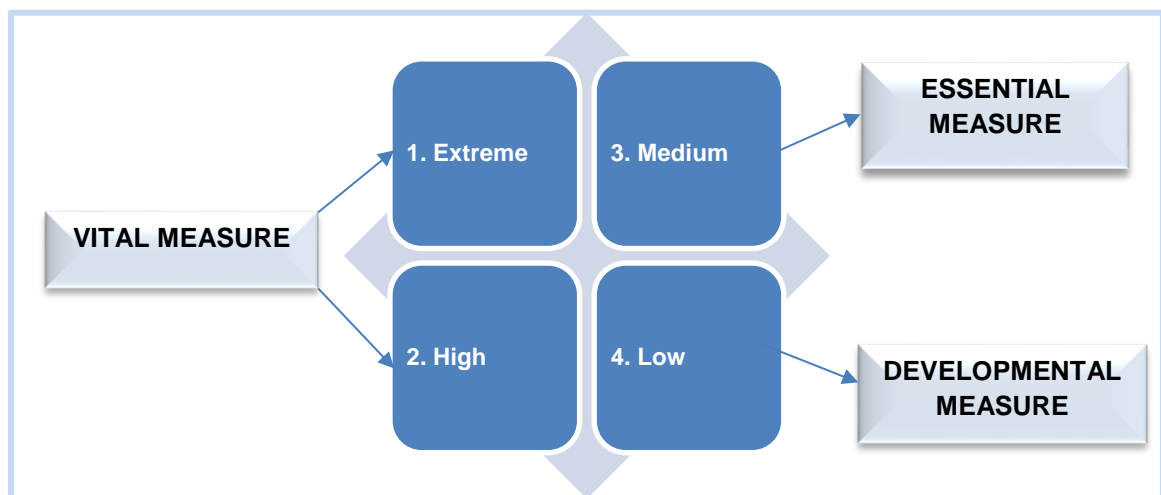
The Clinical Support Services domain covers specific services essential in the provision of clinical care and includes the timely availability of medicines and efficient provision of diagnostic, therapeutic and other clinical support services and necessary, medical technology, as well as systems to monitor the efficiency of the care provided to patients (Department of Health 2011: 11a).

### **7.3.4 Explanation of standards of measurements**

There are four measurements to the standards in the audit tool in relation to the level of risk anticipated during relicensing inspections. The risks may be identified as extreme, high, medium or low as illustrated in Figure 7.4. To enable objective assessment of compliance to standards each standard has been assigned criteria which are measurable elements of the standards. The



measurements are evidence to determine whether or not a criterion has been met. The criteria may be direct observables i.e. aspects that can be seen, heard or felt by the assessors; or direct analysis such as analysis of policies, minutes of committees and patient record reviews. While these observables may not entirely demonstrate that a criterion is met, they will offer a reasonable assurance that it has. These measures form the basis for the assessment tool and may be used for both internal assessments as well as compliance audits. For a facility to achieve a score of “compliant” it must meet all the vital measures on the audit tool. If the facility is “non-compliant” on any one of the vital measures, the outcome of the overall audit will be reported as non-compliant (Department of Health 2011: 11a).



**Figure 7.4: Standard Risk Rating Scale**

#### 7.3.4.1 Extreme and high measures

Vital measures are those that ensure that the safety of patients and staff are safeguarded so as not to result in unnecessary harm or death. These are non-negotiable measures. These measures include the six fast track standards of the NCS and relate to the six international patient safety goals deemed mandatory by the Joint Commission to obtain compliance certification (JCI 2011: 35).

#### 7.3.4.2 Medium measures

Medium measures are essential measures and those that are considered fundamental to the provision of safe quality care and are designed to provide an in-depth view of what is expected from the provider of health services, for example, continuous quality and risk improvement processes and essential guidelines for the management of high-risk patients.

#### 7.3.4.3 Low measures

Low measures are developmental measures and those elements of quality of care to which health management should aspire to, in order to achieve optimal care. While non-compliance with these standards does not necessarily constitute a risk to patients, they form an integral part of a comprehensive quality healthcare system. Developmental standards enhance the health establishment's ability to provide optimal care and reflect on continuous improvement.

### 7.4 THE SIX FAST TRACK STANDARDS (VITAL MEASURES)

These are critical measures that must be implemented by all healthcare private organisations in eThekweni district. The areas of major concern for our patients are largely reflected in the first three clinical domains and are the ministerial fast track improvement standards (Whittaker *et al.* 2011: 63). All private healthcare facilities must comply with the following fast track standards: (Whittaker *et al.* 2011: 63).

- Values and attitudes of healthcare staff;
- Cleanliness in facilities;
- Waiting times and delays;
- Patient and staff safety;
- Infection prevention and control; and
- Availability of essential medicines and supplies.

These can be measured through direct observation or direct analysis of records and checklists. The proposed clinical audit tool incorporates the six fast track standards of the NCS.

#### **7.4.1 The values and attitudes of staff**

The evidence that patients are treated and cared for in a respectful manner as attested through positive satisfaction surveys. However, a complaints management structure with a policy and procedure for reporting complaints must be in place to improve service delivery. Leaders at all levels provide supervision and positive role modelling. Organisations in the private sector must commit to implementing the clinical domains of the NCS in a unified way with the NCS Patient Rights Charter, Batho Pele Principles and its Mission Statement and Quality Objectives displayed at the entrance of the organisation as well as in strategic locations for full view of the public and staff. This will further demonstrate our commitment to our national priorities and quality objectives of the country.

#### **7.4.2 Cleanliness in the facility**

There must be evidence that patients are satisfied with facility cleanliness. Public areas, for example toilets and the corridors, are kept clean. Availability of adequate cleaning materials and proper waste management controls are in places that meet legislative requirements.

#### **7.4.3 Waiting times queues and delays**

Evidence that waiting times are monitored continuously and improvement plans are implemented. Patients are not delayed in outpatient units or as inpatients, for any procedures that they seek, and there is a proper process for triaging of patients with monitors for waiting times which are adequately managed.

#### **7.4.4 Patient and staff safety and security**

Evidence that proper care is given according to the guidelines of the organisation. Special care to high-risk patients, especially the vulnerable like the aged, children, pregnant and mentally ill patients. There must be evidence of proactive risk identification measures to prevent adverse events. Prompt management of adverse events and the reporting of adverse events. Mortality and morbidity meetings held regularly. Adequate physical safety, and laboratory and x-ray turnaround times are within acceptable time frames. Clinical audits are conducted regularly. Patients are educated about medication intake as well as side effects of medications. Evidence of readiness through emergency plans, mock drills and planning for emergency outbreaks, as part of the hospital's continuous quality improvement programmes.

#### **7.4.5 Infection prevention and control**

Evidence that there is an available infection control policy with a formal system in place to survey and collect data. Standard precautions are monitored (hand washing, waste disposal). Strict infection prevention observed (food and milk preparation areas are included). Isolation protocols especially in the case of contact, airborne or droplet infections.

#### **7.4.6 The availability of medicines and supplies**

Evidence that essential medicines and supplies are in stock. The Pharmacy Council's regulations and protocols are followed. A functional Pharmacotherapeutics Committee (PTC) exists in facilities and addresses the needs of the patients and the organisation. Patients are given adequate information about the dispensed medication.

## 7.5 THE IMPLEMENTATION OF THE NATIONAL CORE STANDARDS IN SELECTED PRIVATE HOSPITALS IN ETHEKWINI DISTRICT

The findings of the study revealed that although the NCS were known to the staff these were not fully implemented at all the hospitals. Several standards of the NCS and the Batho Pele principles were not clearly understood by some of the participants. These were identified as barriers to the successful implementation of the NCS approach in the participating hospitals. However, several strengths and opportunities were identified with staff showing an overall interest and acceptance of the NCS and the Batho Pele principles as the quality model for eThekweni district. This enthusiasm must be tested in application of the NCS and the Batho Pele principles during relicensing inspections in the private hospitals in eThekweni district. A sample checklist (Table 7.4) can provide objective measurement of each standard in the proposed clinical framework and this checklist is recommended to be used to facilitate internal audits with the audit tool. Training and mock drills will be discussed in detail in the next chapter.

**Table 7.4: Sample copy of checklist to support the audit tool**

Number of checklist	0	1		
CHECKLIST DOMAIN 1 – PATIENT RIGHTS				
SUB-DOMAIN: <b>COMPLAINTS MANAGEMENT</b>				
STANDARD:1.8				
<b>Complaints are used to improve service delivery</b>				
CRITERION				
<b>Complaints are managed according to the organisations guidelines</b>				
Number of questions: 5				
DIRECT OBSERVATION/ DIRECT ACCESS	YES	NO	N/A	
<b>1. Observe files of the last three patients that complained.</b>				
<b>2. Copy of complaint in the file.</b>				
<b>3. Copy of response on acknowledgement of complain sent to patient is in file.</b>				
<b>4. Actions taken to rectify situation are recorded.</b>				
<b>5. Copy of the letter to the patient on the actions taken is in the file.</b>				
Actual Score (Sum of positive responses)				
<b>Maximum score (Sum of all questions minus the not applicable responses)</b>				

## **7.6 VALIDATION OF THE PROPOSED AUDIT TOOL FOR CLINICAL RELICENSING INSPECTIONS**

Clinicians must critically evaluate research before attempting to implement the findings into practice, which means that clinicians must determine the clinical relevance of the research to determine if feasible and applicable in clinical practice (Peterson *et al.* 2014: 58-68). The researcher shared the proposed audit tool with fellow nurse managers and participants in the study for objective evaluation of the tool. The proposed sample checklist in (Table 7.4) was tested to ensure relevance and appropriateness for the measure of complaints management in the patient's right domain as an example. The feedback was positive with overwhelming support for the tool therefore providing the evidence for potential implementation into best practice.

## **7.7 SUMMARY OF THE CHAPTER**

The aim of choosing a conceptual framework based on the NCS and the Batho Pele principle was to ensure that we have a common definition of quality and patient safety for health healthcare organisation in eThekweni district. It is hoped that this chapter will be able to shed light on the audit tool as requested by the participants in the study for relicensing inspections of private hospitals in eThekweni district. The primary activity required of all supervisors, managers and staff members is to ensure that compliance with the standards becomes a norm by incorporating it into their current quality improvement processes and the ethical values of nurses. The next chapter discusses the results of the study.

## **CHAPTER 8: DISCUSSION OF THE RESULTS**

### **8.1 INTRODUCTION**

This section discussed both the qualitative and quantitative strands of the study and related it to literature that was reviewed taking into account the conceptual framework of the study that was based on the NCS and the Batho Pele principles. In this exploratory sequential mixed method research design, the researcher sought to elaborate upon and expand the findings of one method with another method. This involved beginning with a qualitative method (interviews) for exploratory purposes which was followed by a quantitative method (survey) with a larger sample population, followed by a documentation review so that with a larger sample the researcher could generalise the results to a population (Creswell 2014: 34).

All data gathered during the study were triangulated and the results of triangulation are presented in Chapter 6. Triangulation is defined as a process or an outcome which involves the combination and comparison of multiple data sources, data collection and or analysis procedures, research methods and inferences and occurs at the end of the study (Teddlie and Tashakkori 2009: 32-33). In so doing, the researcher was able to validate or refute the results of the first two phases of the study in relation to the research objectives and the research questions. The discussion of the results in this section focuses on the objectives of the study in relation to the NCS and the Batho Pele principles as identified at the beginning of the study and towards achieving the aim of the study which was to develop an audit tool to assess quality and patient safety standards for regulatory relicensing inspections in private hospitals in eThekweni district. These objectives were to:

- Assess nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections for private hospitals in relation to the clinical domains of the NCS and the Batho Pele principles.

- Assess the evidence-based best practice standards and its outcomes in selected private hospitals in eThekweni district and how these contribute to the delivery of quality healthcare to patients and users of the service.
- Based on the clinical domains of the NCS and Batho Pele principles to develop an audit tool for relicensing inspection of private hospitals in eThekweni district.

## **8.2 DISCUSSION OF THE STUDY'S FINDINGS IN RELATION TO THE NATIONAL CORE STANDARDS AND THE BATHO PELE PRINCIPLES**

The purposes of the seven cross-cutting domains of the NCS, including the clinical domains, are to:

- Set standards for quality service through defining and specifying what is expected in terms of quality in the healthcare sector.
- Develop a common definition of quality of care which should be found in all health establishments in South Africa.
- Establish a benchmark against which health establishments can be assessed identifying gaps and appraising the strengths identified in achieving compliance with the standards (Department of Health 2011: 8a).

The NCS reflect what is expected and required in order to deliver safe quality care and are complemented by a set of measurement tools to assess compliance with these measures. The NCS are structured into seven cross-cutting domains to reflect a health systems approach, and define the scope or intent of assessing a health area where quality or patient safety might be at risk. The first three clinical domains relate to the core business of the health system while the final four domains refer to the support systems that ensure that the former are delivered (Whittaker *et al.* 2011: 62). These domains are further divided into sub-domains. The focus of the study was based on the first three clinical domains, namely, Patient Rights, Patient Care and Support Services.



The question that had to be answered, in an attempt to achieve the objectives, was whether the current relicensing audits are based on the NCS and the Batho Pele principles in the participating private hospitals in eThekweni district, and to also identify the evidence-based best practice standards that exist in the participating eThekweni private hospitals, and their impact on the quality of care that is provided. In analysing the results in relation to the objectives of the study whereby a mixed method exploratory sequential approach of inquiry was employed, several aspects of the NCS and the Batho Pele principles were assessed using various assessment methods including interviews, questionnaires and records. The findings from the different assessment methods concurred, amounting to triangulation of the findings, obtained from different data sources and through different research methods. The results achieved for meeting the objectives of the study are regarded as a true reflection of how the current relicensing inspections are being conducted and what best practice standards exists in private hospitals.

According to the results of the study, several areas of the NCS clinical domains for quality and patient safety are inadequately checked with many participants reporting inconsistencies with the relicensing process. However, the eThekweni district private hospitals in the study are not the only private hospitals in this situation. Similar situations have been reported in other healthcare organisations in eThekweni district where the NCS quality model is not fully implemented. It has been further reported that implementing the NCS throughout every healthcare establishment in South Africa will take time and effort (Department of Health 2011: 7a). To fast track and focus management's efforts on quality and patient safety, six quality priority areas were identified for the first phase of implementation ((Whittaker *et al.* 2011: 62). The priority areas reflect patients' most pressing concerns regarding health services, especially in the public sector and these relate to the six fast track standards of the NCS and the Batho Pele principles. These are considered the six most critical areas for patient-centred care and are based on the Constitution of South Africa, the Batho Pele principles, the Patient Rights Charter and the

NCS and are in accordance with the National Service Delivery Agreement (NSDA) (Whittaker *et al.* 2011: 63).

The six priority areas for immediate improvement are largely reflected in the first three clinical domains of the NCS and the Batho Pele principles which was also the focus of the study; namely:

1. Values and attitudes of staff, so that patients are treated in a respectful manner with due respect for patient privacy and choice (domain: Patient Rights).
2. Reducing waiting times and queues for administration, assessment, diagnosis, pharmacy, surgery and referral and transfer time (domain: Patient Rights).
3. Cleanliness of hospitals and clinics, including buildings, grounds, amenities, equipment and staff (domain: Patient Rights).
4. Keeping patients safe and providing reliable care by reducing adverse events resulting from care given, including operations and failures of the system and its workers through ignorance, inadequate inputs, systems failure or negligence (domain: Patient Safety, Clinical Governance and Care).
5. Preventing infections from being passed on in hospitals and clinics, specifically hospital-acquired infections (domain: Patient Safety, Clinical Governance and Care).
6. Ensuring that medicines, supplies and equipment are available and that patients get their prescribed medicine on the same day (domain: Clinical Support Services) (Department of Health 2011: 7-28; Whittaker *et al.* 2011: 59-67).

In South Africa, the National health Insurance (NHI) aims to provide access to quality health services for all South Africans. The introduction of the NSDA in October 2010 with its focus on primary healthcare (PHC), re-engineering, and NHI as a means to obtain universal health coverage, re-emphasised high level governmental commitment to improving quality. The NSDA objectives are: increase life expectancy; decrease maternal and child mortality; combat

HIV and AIDS; decrease the burden of disease from TB; and, strengthen health-systems effectiveness and improve quality at all levels of the health system (Whittaker *et al.* 2011: 60). The NHI will accredit and contract eligible health facilities that meet nationally approved standards both in the public and private sector. It is therefore imperative for private sector hospitals to be included in the preparations for NHI which further emphasises the need for a common audit tool for national level audits for both the private and public sector hospitals based on the NCS and the Batho Pele principles.

To meet the NHI quality standards which focus on the NCS and Batho Pele principles, health facilities will be certified by the OHSC. The OHSC was established in 2013 through amendments to the National Health Act of 2003. The role of the OHSC is to ensure compliance with National Quality Standards for health by all health establishments in both the public and private health sectors. The role of the inspectorate within the OHSC is to enforce compliance with the norms and standards (Republic of South Africa 2017a: 31). The NHI also, through its quality initiatives, seeks to address fragmentation of healthcare with a major focus on effective leadership at the different levels of care affecting the delivering quality health services. In the public sector, significant increases in utilisation of services due to the high burden of disease, and associated increased patient loads, have further compromised the quality of care. The public's discontent with the quality of services has escalated medico-legal claims in both the public and private sectors, putting enormous strains on the organisations' financial resources as well as those of individual healthcare professionals. These challenges need to be adequately addressed within a unified health system in the public as well as the private sector (Republic of South Africa 2017a: 13).

The government seeks to ensure that the rights of its citizens are respected, protected and promoted. The Constitution of the Republic of South Africa Act No. 108 of 1996 (Republic of South Africa 1996a: 6) underpins democratic transformation. It protects the rights of every South African citizen. Chapter 2 of the Constitution deals with the Bill of Rights which is the cornerstone of

democracy in South Africa. It enshrines the rights of all people in South Africa and affirms the democratic values of human dignity, equality and freedom. The Bill of Rights applies to all laws and binds the legislature, the executive, the judiciary and all organs of state (Republic of South Africa 1996a: 6).

The results of this study clearly indicates that the expectations of the regulator are not being met during relicensing inspections for the private hospitals included in eThekweni district included in this study. Currently, the Patient Rights, Patient Care and Support Services domains are inadequately checked against the NCS and the Batho Pele principles during relicensing inspections, with many inconsistencies as reported by the participants in the qualitative phase of the study and validated by the quantitative findings. These inconsistencies in licensing and relicensing audits can relate to previous studies in which have indicated that a lack of effective communication on part of the regulator may lead to major target areas being unchecked, especially in high-risk areas of the organisation (Blewett *et al.* 2003: 425-433; Ensor and Palmer 2009: 5-7).

### **8.3 THE STUDY FINDINGS IN RELATION TO THE CLINICAL DOMAINS IN THE QUANTITATIVE PHASE OF THE STUDY**

#### **8.3.1 Assessment of the Patient Rights domain**

The findings showed that there were significant agreements and disagreements among participants regarding the current relicensing inspections in participating hospitals in the quantitative phase of the study, in the Patient Rights domain. These findings relate directly to the NCS and the Batho Pele principles and to Objective 1 of the study. The findings corroborated the qualitative results in which the main theme was that the Patient Rights domain was inadequately checked during relicensing inspection. In the public sector, in May 2011 to May 2012, with funding from the national Department of Health, an audit of every health facility was conducted by a consortium of partners. The audit assessed infrastructure, classification of facilities, compliance to priority areas of quality and function,

human resources, access and range of services offered. The results showed that public health facilities in South Africa collectively scored less than 50% compliance with vital measures in two out of the six ministerial priority areas. These measures included: Patient Safety and Security (34%) and Positive and Caring Attitudes (30%). The priority area, Waiting Times scored the highest compliance to vital measures at 68%. PHC facilities on average scored lower than hospitals in all priority areas (Department of Health 2012: 1). A similar audit investigating NCS clinical domains in private sector hospitals has been called for by the participants in this study.

#### **8.4 Assessment of the Patient Care domain**

In the quantitative phase of the study, there were significant agreements and disagreements regarding the assessment of the Patient Care domain during the relicensing inspections. These findings relate directly to NCS and the Batho Pele principles and to Objective 1 of the study. These findings also corroborated with the qualitative results in which the main theme was that the Patient Care domain was inadequately checked during relicensing inspection. The licensing of healthcare facilities and service providers is commonly practised in many countries and is a legal requirement to operate a facility and ensure clinical and structural compliance (Kabane 2013: 30). Audit and feedback are intended to enhance professional performance and thereby improve the quality of healthcare and patient safety (Flottorp *et al.* 2010: 5). The Department of Health's audit tool, namely, R158, is used annually to ensure structural compliance, however it is a poor indication of the actual clinical performance of the service providers or the hospital as an institution. Donabedian (1988: 1743-1748) described structure, process and outcome standards as forming the basis of quality and performance standards. The focus has now shifted towards developing ways of measuring processes and outcomes (Shukor, Klazinga and Arah 2007: 6). Performance standards involve developing a set of performance standards specific for hospitals based on size, package of services and level of care. The performance of a hospital should be measured against set standards, and similar hospitals can

then be compared to one another using this set of standards (Kabane 2013: 30). The continuous quality and performance improvement approach enjoys the support of many countries and is based on the premise that no matter how excellent performance is, there is always room for improvement (Flottorp *et al.* 2010: 5). This philosophy is also the one that drives many important research and quality improvement initiatives in healthcare. It involves regular analysis and testing of the systems to develop new ways and means to improve performance.

#### **8.4.1 Assessment of the Clinical Support Services domain**

In the quantitative phase of the study, there was one significant agreement and several disagreements regarding the assessment of the Clinical Support Services domain during the relicensing inspections. These findings relate directly to NCS and the Batho Pele principles and Objective 1 of the study. These findings corroborated the qualitative results in which the main theme was that the Clinical Support Services domain was inadequately checked during relicensing inspection. The National Baseline Audit report (Department of Health 2012: 2) of public hospitals reported that certain services, including two which are highly crucial to health support services namely, Emergency Medical Rescue Services and Laboratories Services, are inadequately covered in the audit tool provided by the national Department of Health and can therefore not be reported on regarding either scope of services or quality. The report also concluded that the availability of functional and essential medical technology equipment in maternity wards needed priority attention, especially considering the high maternal mortality rates in the country and being one of the imperatives of the Millennium Development Goals (2010), (Goal #5), which is to improve maternal health. Hospitals and PHC facilities throughout the country showed a high percentage of failure in compliance to the vital measure dealing with the availability of medicines as per the Essential Drug List. Similar reporting for the private sector has been advocated by the participants in the study.

#### **8.4.2 Best Practice Patient Rights domain**

In the quantitative phase of the study there were only significant agreements regarding the existence of best practice standards in the Patient Rights domain. The results of the study showed that the following best practice policies guided nursing practice in participating hospitals. There were no disagreements reported. These findings related directly to NCS and the Batho Pele principles and to Objective 2 of the study. Healthcare management is charged with implementing high-quality care. The Patient Rights, Patient Safety, Clinical Governance and Care and the Clinical Support Service domains cover the appropriate management processes required for this, namely: effective and quality clinical care and ethical practice; the reduction of unintended harm to healthcare users or patients in identified contexts of clinical risk; and, the management of adverse events, including healthcare-associated infections, to support any affected patient or member of staff and to prevent occurrence or recurrences (Lourens 2012: 3-4). Furthermore, healthcare organisations must view the effects of clinical audits through meta-regulation as positive for the patient, the organisation and the public at large. Clinical audits in the form of inspections or accreditation are beneficial to the organisation and there are studies that report increased patient and staff satisfaction in areas such as waiting times and customer satisfaction levels at some accredited hospitals (Al Tehewy *et al.* 2009: 183-189).

#### **8.4.3 Best Practice Patient Care domain**

In the quantitative phase of the study, there were only significant agreements regarding the existence of best practice standards in the Patient Care domain. There were no disagreements reported. These findings related directly to NCS and the Batho Pele principles and to Objective 2 of the study. Most private hospitals in eThekweni district implement an internal quality management system. External quality audits for private healthcare facilities are undertaken with regulatory inspections from the Department of Health using the R158 tool, during annual relicensing inspections (Department of Health 1996: 1-55). During the relicensing inspections, some of the clinical

standards are checked by the auditors without an audit tool or a checklist for constructive feedback. Clinical audits may be undertaken in any form as in the case of internal audit processes within healthcare organisations, to assess quality of care. Examples are tools to evaluate the critical points in postoperative care as documented in standard care plans, or the clinical audit of randomly selected postoperative patient files which can be used with great success when teaching nursing students, the importance of postoperative care (Lourens 2012: 3-4). However, participants agreed that there is no such audit tool for clinical relicensing inspections in participating hospitals. Many requested a standardised audit tool to encourage learning and growth and to have the ability to benchmark with other organisations to gain a level of confidence that they are on the right track.

The Department of Health's Handbook for District Clinical Specialist Teams (DCST) is an imperative for Millennium Development Goal #5 to improve maternal health. The handbook advocates clinical effectiveness using the 6 Rs: right care, right patient, right time, right clinician, right skills, right way in conjunction with the NCS guidelines and policies that are aligned to the maternity guidelines published by the Department of Health (Department of Health 2014: 12). The participants in this study expressed having early warning signs and policies that were not checked during relicensing inspections. In a study of patient safety in Middle Eastern and African countries the frequency and nature of medical errors in hospitalised patients was assessed. The study found that the proportion of preventable error was significantly high at 83%, while previous studies showed 50% preventable error (Devine, Hansen and Wilson-Norton 2010: 5). The authors suggest that previous studies might have confused the causation and preventability and misclassified some medication errors. It was concluded that it is evident that patient safety is even more vulnerable and misunderstood in developing countries and therefore, it is important to explore the perception and level of awareness of health professionals about different dimensions of patient safety which participants recommended be included in the Department of Health clinical audits.



In South Africa, the Council for Health Services Accreditation of Southern Africa noted that hospitals having some kind of quality interventions or seeking accreditation showed an overall improvement rate of between 48% to 78% with continuous quality improvement and with significant positive changes (Salmon *et al.* 2003: 1-49). Accreditation or regulatory inspections have also been associated with higher infection control performance scores (Sekimoto *et al.* 2008: 212-219).

#### **8.4.4 Best Practice Clinical Support Services domain**

In the quantitative phase of the study, there were only significant agreements regarding the existence of best practice standards in the Clinical Support Services domain. There were no disagreements reported. These findings related directly to NCS and the Batho Pele principles and to Objective 2 of the study. Whittaker *et al.* (2011: 60) argued that certification and accreditation are voluntary processes whereas licensure standards are intended to define the quality level that is necessary for patient care or health services, for example, drug dispensing by a pharmacy to be safely delivered. Participants agreed that the support services were inadequately checked during relicensing inspections. The private sector could benefit as much as the public sector with regard to functional and essential medical technology equipment assessments, education, planning and training, for example in maternity units considering that high maternal mortality rates is one of the imperatives of the Millennium Development Goal #5 to improve maternal health. In the base line audit report of the Department of Health, PHC facilities throughout the country showed a high percentage of failure in compliance with the vital measure dealing with the availability of medicines as per the Essential Drug List (Department of Health 2012: 12). Similar reporting for the private sector has been advocated by the participants in the study.

## **8.5 EVIDENCE-BASED PRACTICE GUIDELINES AND MONITORING OF QUALITY AND PATIENT SAFETY TRENDS**

The results for best practice in the three clinical domains of the NCS yielded significant agreements for all three domains. Participants agreed that they were aware of the existence of best practice policies and procedures in their organisations relating to the three clinical domains. The first three clinical domains of the NCS as related to the Batho Pele principles links directly to the core values and philosophy of a nurse, who pledge allegiance to the nursing profession. The clinical domains of the NCS further incorporate aspects of the scope of practice of nurses in R2598 of the Nursing Act (Republic of South Africa 2005: 25) which relate to the scope of work of a nurse in which caring may be enhanced. Improving the quality of healthcare today requires a commitment to delivering healthcare based on sound scientific evidence aimed at continuously introducing innovative, effective healthcare practices and preventative approaches (Hafner *et al.* 2011: 697-704).

Lack of evidence supporting effective healthcare practices contributes to inappropriate care. Encouraging evidence-based practice, and promoting appropriate, effective healthcare requires a robust healthcare research enterprise, careful assessments of the effectiveness of healthcare technologies and practices and approaches to encourage the widespread dissemination of effective healthcare (Republic of South Africa 2007: 13). Evidence-based practice may be defined as "the integration of best research evidence with clinical expertise and patient values" (Sackett *et al.* 2000: 1). This definition highlights the importance of combining the best available evidence with clinical judgement which emphasises a pivotal role for patient-centred care. One of the most common ways of incorporating evidence-based research is to incorporate it into an organisation's policies and procedures (Pipe *et al.* 2005: 365-370). Evidence-based performance measures are considered to be well suited for performance improvement purposes, since they can often identify specific deficiencies in processes of care, which can

then be readily addressed and thus have a salutary effect on clinical outcomes (Hafner *et al.* 2011: 697-704).

Since 2002, Joint Commission-accredited hospitals throughout the world have reported their performance on nationally standardised clinical measures of quality to satisfy both regulatory and accreditation requirements. These measures have been endorsed by the National Quality Forum and adopted by the Hospital Quality Alliance (Hafner *et al.* 2011: 697-704). Since 2004, hospital performance on measures has been publicly reported through the Joint Commission websites. American hospitals are not alone in reporting performance data on clinical indicators as performance data are increasingly used by ministries of health in European countries and Canada to track the quality of the healthcare as delivered by government health systems as well as inform their citizen consumers (Hafner *et al.* 2011: 697-704). Other international quality and patient safety agencies advocating best care practices include the AHRQ, the JCI, The Institute for Healthcare Improvement (IHI), Canadian Safer Healthcare now, and the WHO, all of which the researcher accessed via search engines during the literature review. One of the most commonly stated objectives for publicly reporting a hospital's performance data is to stimulate performance improvement in hospital delivered care processes, as public reporting of this type of data has been associated with improved performance. Clinical performance measure rates for USA hospitals have shown a steady rate of improvement over time (Hafner *et al.* 2011: 697-704).

The National Policy on Healthcare in South Africa (Republic of South Africa 2007: 13) requires both public and private sector organisations to focus best practices on:

- Basic, clinical, prevention and health services research specific to the needs of South Africans.
- Strengthening the scientific evidence base for healthcare practices through collaborating in technology assessment and research targeted at gaps in existing knowledge in the South African context.

- Encouraging widespread adoption of innovations that have been demonstrated to be effective through awareness raising, information and technical and other support mechanisms for implementation programmes.

In eThekweni district, some examples of private organisations supporting best practices are the Best Care Always Foundation, The KZN Antibiotic Stewardship Forum, the Forum for Nurse Leaders and the National Education Association which seeks to involve health professionals from both the private and public sectors. Participating hospitals and health professionals are willing to make evidence-based changes at a faster pace, share ideas with others and measure results and report on progress.

The Department of Health in South Africa makes provisions for public information systems to measure quality improvements across the National Health System in the public sector (Republic of South Africa 2007: 16-17). Healthcare information systems may assist guide the internal quality improvement efforts of healthcare organisations, generate data on the institutions comparative performance, help improve the co-ordination of care, advance evidence-based healthcare and support continued research and innovation in both the private and public sectors healthcare organisations. National standards for the structure, content, definition and coding of health information has been established to support improvements in information systems (Republic of South Africa 2007: 16-17). A standardised assessment tool such as the NCS in South Africa used for clinical audits in the public sector produces reports on compliance with standards and gives a percentage score per domain, sub-domain or standard. The risk rating also informs how compliance against the standards are scored and reported, with weighting of the results in accordance with the impact on patient care and safety. In addition, the highest risk areas are also reported separately, to highlight the need for immediate corrective action to avoid potential catastrophic events (Department of Health 2011: 14a). This however has not been the practice in the private sector regulatory relicensing audits.

Participants expressed their views on having auditable standards during relicensing inspections with constructive feedback and the ability to benchmark with other hospitals in the eThekweni district.

## **8.6 DISCUSSION OF THE RESULTS BASED ON THE OBJECTIVES OF THE STUDY**

### **Objective 1: Assess nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections for private hospitals in relation to the clinical domains of the NCS and the Batho Pele principles**

The researcher sought for relationships among the themes in the qualitative phase and the results of the quantitative phase and the way in which they concurred with the clinical domains of Patient Rights, Patient Care and Support Service domains of the NCS and the Batho Pele principles and with literature reviewed and gained further insight which contributed effectively to answering the research questions. According to Saunders, Lewis and Thornhill (2009: 159), the researcher can predict the pattern of the research findings based on theoretical propositions that can be obtained from prior research, knowledge or theory in order to explain what the researcher expects to find. Data analysis was not intended to confirm or dispute a hypothesis, it was more about building explanations on whether construct and patterns were matched or not with the conceptual framework (Yin 2009: 223-226). If the patterns were matched, this will result in greater validity of the conceptual framework chosen by the researcher (Yin 2009: 223-226). In this study, the NCS of South Africa and the Batho Pele principles as discussed in Chapter 3 and Chapter 4 provided the framework for data collection and analysis. The experienced pattern was tested against the expected pattern. The experienced pattern is the NCS and the Batho Pele principles and how it impacts on quality and patient safety in private hospitals in eThekweni district. This experienced pattern was tested against the expected pattern. The predicted pattern is related to nursing staff perceptions regarding the NCS and the Batho Pele principles which will have an impact on quality and patient safety at private hospitals in eThekweni district. Thus, the experienced pattern

was tested and did not match the one predicted by the study's findings in the qualitative and quantitative phases of the study and this finding is related to Objective 1 of the study in that the participants were of the opinion that the Patient Rights, Patient Care and Support Services domains are inadequately checked during the current relicensing inspections.

The nurses' experience of the NCS and Batho Pele principles during the annual relicensing inspections was very limited. To illustrate, the study found that the senior management staff who actually prepare and undertake the current clinical relicensing audits agreed that the clinical domains are not the focus of the audit and are inadequately checked during relicensing inspections. These findings were validated in the quantitative phase of the study by the nursing staff in the clinical departments who render direct patient care. The findings from both the qualitative and the quantitative phases of the study found participants agreeing that there are no auditing standards or criteria that are followed during regulatory relicensing inspections with no constructive feedback in the form of a ratings or the mention of the number of high clinical risks in the organisation.

Many of the participants, in both the qualitative and the quantitative phases of the study requested the implementation of a standardised audit tool for guidance and support during clinical audits by the regulator. Participants also agreed that there are too many inconsistencies during the process of relicensing visits. The lack of a standardised audit tool leads to difficulty in planning and maintaining a quality system with so many inconsistencies in the actual audit process. The NCS and the Batho Pele principles were known to the nursing services managers and the unit managers who stated that they incorporate aspects of the processes in daily practice but also indicated that they do not receive any constructive feedback during the audits. Although the organisation has its own internal clinical audit structure for regulatory relicensing inspections participants felt that an auditable tool by the regulator will provide for the much needed guidance and support to ensure that all hospitals follow a common set of guidelines for relicensing inspections. They

also expressed their sentiments in their ability to measure their performance with other organisations thorough the use of a common audit tool with structured feedback in the form of ratings to benchmark with other organisations.

The NCS incorporates the Batho Pele principles which are to improve service delivery (Department of Health 2011: 18-28a). The clinical domains of the NCS also require that all staff treat patients with respect and courtesy and with empathetic care and dignity. Under the Batho Pele framework, there is zero tolerance for the lack of respect and privacy for patients and leaders must ensure that the environment of care for patients is satisfactory. Leaders at all levels must provide supervision and positive role modelling. These requirements are also embodied in the six ministerial fast track standards of the NCS and the Batho Pele principles, the Patients' charter and the patients' rights and responsibilities which were visibly evidenced during the documentation review at each of the hospitals (Whittaker *et al.* 2011: 63).

The National Health Act in the white paper towards universal health coverage, NHI (Republic of South Africa 2017b: 12) noted that quality of healthcare has been associated with dissatisfaction amongst the users of health services with respect to acceptability of the healthcare services and patient experience. Public sector facilities are regularly assessed against core quality standards and studies have revealed that there are quality problems in the areas of staff attitudes, waiting times, cleanliness, drug stock outs, infection control, and safety and security of staff and patients. Although efforts have been made to address these challenges, they continue to persist in the public sector (Republic of South Africa 2017b: 12). This type of an assessment to date has not taken place in the private sector.

The Patient Rights domain, Patient Care domain and Support Services domain is further emphasised in the White Paper on NHI whereby access to healthcare including timely emergency care in any health facility that is open to patients regardless of their ability to pay. Patients have a right to receive

information related to the type of health coverage or to choose a health provider or facility for treatment provided and to the right of refusal of treatment provided it does not endanger the health of others. That right also includes the right to be referred for a second opinion as well as to the continuity of care and the ability to complain about the health services (Republic of South Africa 2017b: 31-32). These rights directly relate to the Batho Pele principles of service delivery which the results of the study found to be inadequately assessed during relicensing inspections.

The NCS enforces the implementation of the Patient Rights Charter and the Batho Pele principles which strengthens the need to ensure physical and mental well-being of patients through participation in the development of health policies and decision-making on matters affecting their health (Department of Health 2011: 18a). The NCS also requires that mentally ill patients are treated in a less intrusive manner. Involuntary psychiatric treatment occurs when such conditions as the medicating or placing in treatment facilities of patients without their consent is undertaken. This practice of forcible treatment violates the due process and rights of patients and is a violation of accepted medical ethics (Rushforth 2014: 98). Medical ethics does not lend itself to the use of coercive treatment. The participants interviewed from the hospitals that have psychiatry units mentioned the use of restraints that are sometimes ordered by the psychiatrists. Participants also noted that consent is obtained prior to their use from the family members with frequent observations of the patient during use. This aspect of care directly links to the Batho Pele principle framework and the results of the findings in both research methods failed to show that these aspects of mental health are given much emphasis during relicensing inspections.

Batho Pele essentially means 'putting the patient first and treating the patient with respect and dignity'. Literature reviewed suggested that dignity is fundamentally concerned with claims of worth or value with behaviour that justifies such claims and with treatment by others that shows appropriate respect. Dignity therefore is not just reducible merely to autonomy or to



respect. Furthermore, dignity serves an important function in nursing ethics and is a necessary and an appropriate nursing value (National Dignity in Care Campaign 2009: 7; SANC 2013: 3). Batho Pele involves creating a framework for the delivery of public and private services which treats citizens more like customers and enables the citizens to hold public and private servants accountable for the service they receive. It can be stated that it is a framework which allows the energy and commitment of public and private servants to focus on more customer focused ways of working (Republic of South Africa 1997: 12). Respect is central to a culture of compassionate care in nursing practice, in the vision and strategy for nurses and midwives (Gaw and O'Neill 2014: 12-13). However, compassion may be seen by some as a soft attribute implying a passive absence of all ill feelings. This means that for compassion to be active it would require a range of values and behaviours that are knitted together in our interaction with patients on a daily basis (Gaw and O'Neill 2014: 12-13). These activities could range from informed consent to patient and family education in any age or patient condition. The results of the study showed inconsistencies in checking these standards during relicensing inspection.

Patient Rights is advocated and practised internationally, and the JCI with its six international patient safety goals advocates that the organisation as a whole has to establish a framework for ethical management that ensures that patient care is provided within business, financial, ethical and legal norms that protect patients and their rights (JCI 2011: 191). The leadership and governance standard of the JCI requires leaders to understand these responsibilities as they apply to the organisation's business and clinical activities by creating guiding documents to provide a consistent framework to carry out these responsibilities. These responsibilities include disclosure of ownership and any conflicts of interest, honesty in portraying its services to patients, providing clear admission, transfer, and discharge policies, accurately billing for its services, and resolving conflicts when financial incentives and payment arrangements could compromise patient care which relates to the standards of the NCS and the Batho Pele principles.

**Objective 2: Assess the evidence-based best practice standards and its outcomes in selected private hospitals in eThekweni District and how these contribute to the delivery of quality healthcare to patients and users of the service**

This major theme is related to the clinical domains of the NCS and the Batho Pele principles and refers to how the relicensing audit assesses Patient Rights, Patient Care and Support Services in relationship to best practice standards which contributes to quality and patient safety in the overall clinical governance of the organisation. Participants felt comfortable in the answering these questions in the interview which revolved around patients' rights, quality nursing care, clinical care and ethical practice. The participants were familiar with evidence-based best practices that prevented unintended harm to healthcare users or patients including healthcare-associated infections and listed policies and procedures to optimise care. Furthermore, the participants were in agreement that with evidence-based bundle practices they felt a level of comfort as it provided guidelines for nursing practice which contributed to quality and patient safety.

In the qualitative interview, nurse managers noted key benchmarks that they follow to meet targets on a monthly basis. They submit monthly reports to their managers and hold monthly meetings to discuss clinical governance issues as part of ongoing quality and patient safety initiatives. In this part of the study, the aim was to identify if best practice standards existed in the participating private hospitals and how they contributed to quality and patient safety to the users of healthcare. The experienced pattern (NCS and the Batho Pele principles) was tested against the expected pattern (evidence of best practice standards in private hospitals) to assess how it impacts on quality and patient safety of healthcare users in the participating private hospitals in eThekweni district. The predicted pattern was related to nursing staff perceptions regarding the various evidence-based directives, policies and procedures that existed, contributing to quality and patient safety at participating private hospitals in eThekweni district. Thus, the experienced

pattern was tested and matched by the one predicted by the participants in the study's findings in both the qualitative and quantitative phases of the study. This finding is related to Objective 2 of the study in which the results of the findings showed that nursing practice is guided by best practice policies, procedures and directives and quality monitoring to ensure quality and patient safety at private hospitals in eThekweni district.

South Africa is confronted with a quadruple burden of disease because of HIV and AIDS and TB; high maternal neonatal and child morbidity and mortality; rising disease burden of non-communicable disease; and high levels of violence and trauma. According to census figures, TB is the biggest contributor to years of life lost followed by pneumonia and influenza, intestinal infectious diseases, other forms of heart diseases, cerebrovascular disease; diabetes mellitus, HIV and AIDS, hypertensive disease, chronic lower respiratory tract disease and lastly other viral diseases (Republic of South Africa 2017b: 10). According to the National Health Act 61 of 2003, "quality of care is the safe, effective, patient-centred, timely, efficient and an equitable provision of healthcare services to achieve desired health outcomes" (Republic of South Africa 2003: 7). The National Health Act takes into account patient safety, meaning the prevention of harm to patients and advocates clinical governance processes to assure quality. Leaders in healthcare agree that evidence-based practices are becoming the new norm by introducing guidelines to improve patient safety, streamline methods of care, lower costs and increase efficiency. Guidelines are especially useful for refining methods of care for high-volume, high-cost or high-risk conditions (Rizzo 2013: 1). The NCS and the Batho Pele principles takes into account evidence-based practices to ensure safe quality care to users of health services (Republic of South Africa 2017a: 7). The results of the study showed that best practices are inadequately checked during relicensing inspection with many inconsistencies at the various hospitals.

- *Evidence-based best practices to prevent hospital-acquired infections*

Internationally and nationally, healthcare organisations across the world are grappling with making healthcare safer for patients through carefully designed systems and methods of care that reduce risks to patients including the assessment of patient safety culture amongst their staff (Mayeng and Wolvaardt 2015: 1-7). In South Africa, the most common problems experienced by healthcare users in public institutions include lack of cleanliness; poor safety and security; long waiting times; poor staff attitude; and poor infection control measures and the non-availability of drugs (Mayeng and Wolvaardt 2015: 1-7). The need to redesign and strengthen existing systems and implement evidence-based methods has been met by the sudden emergence and re-emergence of infectious diseases as well as the gradual development of drug resistance. These threats make it that more important that healthcare-associated infections acquired in health facilities are prevented or effectively controlled when it occurs.

In South Africa, these threats have undermined the significant healthcare advances made in the past decade and therefore the country aligns itself to the WHO global safety drive and its own national infection control and prevention strategy (Republic of South Africa 2007: 2). Infection prevention and control guidelines are aimed at providing a safe healthcare environment for patients and staff. Good infection control practice should be established to improve health outcomes and prevent negative outcomes such as morbidity, mortality, increased healthcare costs and possible litigation. Infection prevention and control measures are a combination of interventions and activities, ranging from hand hygiene, aseptic technique, waste management, rational antibiotic use, cleaning and the use of chemical cleaning agents, pest and rodent control, food handling, linen handling and management, isolation, surveillance, risk management, the use of personal protective equipment, employees immunisation programmes and personnel hygiene. Failure in application of any of these dimensions can result in significant negative consequences for patients (Republic of South Africa 2007: 6). In the public

sector, the National Department of Health in collaboration with the provinces developed a national surveillance system for the monitoring of nosocomial infections. This system generates quality data on healthcare acquired infections and antibiotic-resistant organisms. Such data is necessary for facilitation of proper investigation into outbreaks and implementation of prevention and control measures. A national standardised reporting system has also been developed to enable the district, provincial and national structures to extract instant epidemiological data on infectious diseases (Republic of South Africa 2007: 11-13). The various District Infection Prevention and Control Committees receive and discuss institutional risk assessment, risk management and plans at monthly meetings. The Provincial Infection Prevention and Control Committee discuss and submit their provincial risk profiles and management plans to the National Department of Health. Evidence-based infection prevention and control standards for all levels of care has been developed by the National Department of Health and used in the public sector domain (Republic of South Africa 2007: 11-13). Although the private sector hospitals do not directly report all infection control data to the health department (with the exception of notifiable diseases), many comply with the above required measures of infection control practices. The private and public sector hospitals must follow a common strategy for the prevention and control of infection in South Africa.

Many organisations nationally and internationally also provide expert advice on evidence-based best practices to prevent hospital-acquired infections. In South Africa organisations such as the Best Care Always Foundation with its antibiotic stewardship programmes and quality initiatives for hospitals contribute to reducing hospital-acquired infections namely, Central Line Arterial Blood Stream Infection (CLABSI), Ventilator Acquired Pneumonia (VAP), Catheter Associated Urinary Tract infection (CAUTI ) and SSI through regularly sharing evidenced based information through publications and annual conferences (Best Care Always Foundation 2013: 1-11). International forums such as the IHI advocates risk assessment and reduction of clinical adverse events through effective leadership and communication using the

SBAR tool (Frankel *et al.* 2017:1-32). The IHI advocates redesigning healthcare systems to reduce risk factors and to optimise evidence-based processes of care within equitable and cost-effective measures (Wyatt *et al.* 2016: 15). Essentially, the process for prevention of SSIs are core measures of the IHI and SCIP and include essential components in surgical safety efforts including selection, timing and duration of antimicrobial prophylaxis; glucose control in surgery; hair removal technique and other basic prevention strategies (Resar *et al.* 2012: 6-8). The JCI in its international patient safety goals places emphasis on its fifth goal which is dedicated to the prevention and control of infection (JCI 2011: 39). Pyrek (2017: 9) in an Infection Control Today (ICT) publication emphasises zero tolerance for non-compliance with infection control measures advocating for mind control in reducing hospital-acquired infections. In a study to find out how the brain factors into infection-prevention compliance, researchers had a psychologist teach soft skills and focus on harnessing the power of the mind for better time management and team collaboration. The study participants (infection control team leaders) underwent lectures and simulations after which 10 of the 12 team leaders (83.3%) came away with higher behavioural competencies. These improvements particularly showed in the following areas: the powers of negotiation; ability to get along with peers, juniors and seniors; leadership skills; communication skills; and, emotional intelligence. While not every instance of healthcare-associated infection can be pinned on staff hygiene, too many occurrences can be attributed to the very people who are supposed to protect patients. The reality of insufficient attention to hand washing, person protective equipment with donning and doffing, and other areas of infection prevention, remains baffling. The big question often asked is “why” – why do some staff cut corners when they know the consequences of not adhering to standard processes for basic hand hygiene and activities such as PPE donning and doffing? The answers vary but often boil down to one simple reality, human nature (Jaggi *et al.* 2013: 187). In this section of the study, participants indicated that there are many inconsistencies with checking of infection control and best practice standards that existed in their hospitals.

- *Evidence-based practices to reduce clinical risks in hospitals*

Most hospitals seek to deliver exceptional healthcare in a family centred and compassionate manner to the community. Healthcare organisations must be committed to creating a safe environment and to secure health, safety and welfare at work of all patients, employees, visitors and others for whom they are responsible (JCI 2011: 1). The origins of patient safety problems are classified in terms of *type error*, for example: communication failures between patient or patient relatives and practitioners; *patient management*, for example, improper delegation, failure in tracking, wrong referral, or wrong use of resources; and *clinical performance*, that is before, during, and after an intervention (Hughes 2008: 2). Many patient safety practices such as use of best care practices, computerised physician order entry, and crew resource management, have been considered and researched as possible strategies to avoid patient safety errors and improve healthcare processes. There are still innumerable opportunities for further research in this area (Hughes 2008: 2). Practices considered having sufficient evidence to include in the category of patient safety practices include those listed in the bullets below.

- *Appropriate use of prophylaxis to prevent VTE in patients at risk*

Venous thromboembolism is a frequent complication of general surgery and is considered to be the most common preventable cause of hospital related death. Before preventative measures for VTE were implemented, it was estimated that 10% of hospital deaths were associated with VTE. Venous thromboembolism prophylaxis has been widely proven to cost-effectively reduce the incidence of thromboembolic events in admitted patients and it is considered a priority practice to guarantee patient safety and serves as a quality indicator of healthcare (Galante *et al.* 2012: 649-656).

- *Continuous aspiration of subglottic secretions to prevent ventilator-associated pneumonia*

Ventilator-associated pneumonia (VAP) remains an important cause of intensive care unit (ICU) morbidity and mortality, despite advances in antimicrobial therapy, better basic care of intubated patients on mechanical ventilation and a wide variety of preventative measures. Ventilator-associated pneumonia continues to complicate the natural history of 8% to 28% of invasively ventilated patients. Its incidence varies from 10 to 30 episodes per 1000 ventilator-days. Strategies aimed at reducing the incidence of this complication may improve clinical outcomes, minimise costs related to healthcare and foster patient safety (Viana *et al.* 2013: 308-313).

- *Time-Out Procedure*

Checklists applied in the form of a pre-operative time-out have gained considerable support in the last few years as a means to improve patient safety in the operating theatre. The WHO has developed its own Surgical Safety Checklist and is currently promoting its usage. A recent study showed that the WHO checklist with time-out is not always applied as intended. This raised the question about the behaviour shaping mechanisms behind the deviations. One explanation could be linked to personnel's underlying understanding of the intention of the checklist. The tool is designed to reduce risk, so the understanding of risk among those conducting the time-out may be important for its implementation. From a safety perspective, the checklist can be regarded as a barrier or a 'defence' against failure (Rydenfält *et al.* 2013: 182-187).

Reason, Carthey and de Lavel (2001: 1) distinguished between defences against two types of failures or conditions; 'active failures' which are unsafe acts committed at the onset and that contribute to direct and immediate adverse effects, and 'latent conditions' which are underlying causes that if left unguarded can build up to circumstances where active failures can occur. The questions on the WHO surgical time-out checklist relate to best compliance



related to patient identification, the planned operation, anticipated critical events, surgeon's review, and antibiotic prophylaxis and are all concerned with avoiding direct harm to the patient by avoiding active failures. Checklists can be helpful in completing processes without missing important steps. In the past years, the introduction of checklists to the field of medicine has attracted research interest. Studies have shown that the use of checklists can improve the quality of care and patient safety. Two recent multicentre studies showed that, through the implementation of pre-operative and intra-operative surgical safety checklists, patient outcome could be improved and the implementation of the checklist led to a significant reduction in morbidity and mortality (Salzwedel *et al.* 2013: 176-181). The results of the documentation review in this study noted that all hospitals in the study (n=4) 100% implemented the surgical checklist and time-out policy.

- *Avoiding misidentification of patients*

Misidentification of patients is acknowledged as an important and preventable cause of patient harm. For example, patient misidentification remains the commonest cause of ABO incompatible blood transfusion despite preventative efforts. The extent of misidentification is under-recognised but in the USA, identification errors were found in around 1% of laboratory requests and were the root cause in over 100 incidents reported between 2000 and 2003 (Latham *et al.* 2012: 626-633).

The JCI has listed identification of patients correctly as a priority (JCI 2011: 36). The JCI recommends policies and procedures to be collaboratively developed to improve identification processes, in particular, the processes used to identify a patient when giving medications, blood, or blood products, taking blood and other specimens for clinical testing, and when providing any other treatments or procedures. The relevant policies and procedures require at least two ways to identify a patient, such as the patient's name, identification number, birth date, a bar-coded wristband or other ways. The patient's room number or location cannot be used for identification. Patient

identification is therefore a priority area for improving patient safety, and all healthcare organisations should have systems for ensuring correct identification, and provide staff training and offer patient education on identification. Patient identification is an attractive target for improving patient safety as it impacts on all areas of hospital care and does not need high technology resources. There is almost no published data regarding the prevalence of misidentification in the developing world. (Latham *et al.* 2012: 626-633). One study in South Africa showed errors in identification recording in as many as 60% of critical laboratory result notifications, suggesting that identification is indeed a serious issue. However, there are many real and perceived challenges in implementing identification systems in developing countries, such as understaffing, lack of staff awareness of misidentification as a problem and the difficulty in establishing the need given the absence of systems for adverse event recording in some countries (Latham *et al.* 2012: 626-633). The JCI fourth patient safety goal is that the organisation develops an approach to ensuring correct-site, correct-procedure, and correct-patient surgery. Evidence-based best practices advocated by the JCI in its universal protocol advocate “Site Marking” for preventing wrong site, wrong procedure and wrong person surgery. Marking the surgical site with full involvement of the patient should be consistent throughout the organisation and should be made by the person performing the procedure and should take place with the patient awake and aware and, if possible, the mark must be visible after the patient is prepped and draped. The surgical site is marked in all cases involving laterality, multiple structures (fingers, toes, lesions), or multiple levels (spine) and is done with an instantly recognisable mark followed by a pre-operative verification process and a time-out that is held immediately before the start of any invasive procedure (JCI 2011: 38). The results of this study showed that this standard is inadequately checked during relicensing inspection.

- *Use pressure risk assessment tools and measures to prevent pressure ulcers*

The National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel reported that pressure ulcers are painful, costly, and often preventable complications that threaten many individuals in hospitals, nursing homes, and in-home care (National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel [NPUAP and EPUAP] 2009: 9-12). Pressure ulcers remain a frequently occurring healthcare problem throughout the world. A European pilot survey undertaken by the NPUAP and EPUAP, which included 5947 patients located in Belgium, Italy, Portugal, Sweden, and the United Kingdom, found an overall prevalence rate of 18.1%. In 2001, The NPUAP and EPUAP estimated that pressure ulcer prevalence in American hospitals was 15% with an incidence rate of 7%. More recent national studies fail to demonstrate sustained significant declines in American hospitals or other healthcare settings. Prevalence and incidence rates are often higher in unique populations such as those receiving palliative care at home or in hospice, those with spinal cord injuries and in critical care units. Pressure ulcers represent a major burden of sickness and reduced quality of life for patients with increased morbidity and mortality associated with pressure ulcer development in hospitalised patients. Hospital lengths of stay, readmission rates, and hospital charges are greater in patients who develop pressure ulcers than in those who remain ulcer-free.

Recent European cost-models which highlight the cost of illness associated with pressure ulcers have indicated that the total costs may consume between 1% in the Netherlands and 4% in the United Kingdom of healthcare expenditure (NPUAP and EPUAP 2009: 9-12). Using a structured approach to risk assessment to identify vulnerable patients is of primary importance and includes the use of a risk assessment scale in combination with a comprehensive skin assessment, the assessment of activity and mobility and clinical judgement. The main risk factors are nutritional indicators, factors affecting perfusion and oxygenation, skin moisture, and increased age. Risk

assessment should be conducted on admission, and repeated as frequently as required by patient acuity. Reassessment should also be undertaken if there is any change in the patient's condition (NPUAP and EPUAP 2009: 9-12). The results of this study showed that this standard is inadequately checked during relicensing inspections and that the hospitals have risk assessment tools, policies and procedures guiding practice.

- *The use of universal measures and risk assessment tools to prevent slips and falls in patients*

The JCI's sixth patient safety goal recommends that the organisation develops an approach to reduce the risk of patient harm resulting from falls (JCI 2011: 40). Fall prevention care planning is a process by which the patient's risk assessment information is translated into an action plan to address the identified patient needs. These are the patient-specific actions that, in addition to the universal precautions aim to prevent falls. Care planning's specific purpose is to identify specific care practices that will be implemented so that the patient is less likely to fall during hospitalisation. (Ganz *et al.* 2013: 1). Because each patient has a unique risk profile that needs to be integrated with care for the condition that caused hospitalisation, the care plan should be individualised for each patient. Each year it is estimated that between 700,000 and 1,000,000 people in the United States fall in hospital (Ganz *et al.* 2013: 1). A fall may result in fractures, lacerations, or internal bleeding, leading to increased healthcare utilisation.

Research shows that close to one-third of falls can be prevented. Fall prevention involves managing a patient's underlying fall risk factors and optimising the hospital's physical design and environment (Ganz *et al.* 2013: 1). To mitigate the risks of falls, studies recommend a fall risk assessment in general acute care settings on admission, on transfer from one unit to another, when a significant change in a patient's condition occurs or after a fall. For patients with longer lengths of stay, performing a fall risk assessment at some regular interval may be valuable. However, the optimal frequency of

risk assessment is unclear and may vary from unit to unit and it is therefore recommended that universal falls precautions for all patients be applied regardless of their fall risks assessments (Ganz *et al.* 2013: 1). Universal fall precautions involve keeping the patient's environment safe and comfortable. The results of this study showed that this standard is inadequately checked during relicensing inspections but that the hospitals do have risk assessment tools, policies and procedures guiding practice in this regard.

- *Appropriate use of antibiotic prophylaxis and measures in surgical patients to prevent postoperative infections*

The IHI 5 Million Lives Campaign aimed to dramatically improve the quality of American healthcare by protecting patients from medical harm (IHI 2008: 1-26). The IHI, one of the ten national organisation members of the SCIP Steering Committee, set their first priorities to significantly reduce surgical complications by reliably implementing the four changes in care recommended by the SCIP. The changes included SSI prevention; beta blockers for patients on beta blockers prior to admission; VTE prophylaxis; ventilator-associated pneumonia prevention.

- *Reducing surgical complications with SCIP*

Surgical site infections are the second most common type of adverse events occurring in hospitalised patients (IHI 2008: 1-26). Surgical site infections have been shown to increase mortality, readmission rate, length of stay, and cost for patients who incur them. While nationally the rate of SSI averages between 2% and 3% for clean cases in America an estimated 40% to 60% of these infections are preventable by implementing four components of care, also known as the SCIP bundle practice (IHI 2008: 1-26). This practice advocates the use of appropriate antibiotics given one hour before surgery, appropriate hair removal (no shaving), controlling serum glucose levels of patients undergoing major surgery and maintaining normothermia peri-operatively, patients on beta blockers pre-operatively should be continued on beta blockers post-operatively, the application of VTE measures for those at

high risk, and the ventilator bundle practice for all surgical patients receiving postoperative mechanical ventilation, particularly those ventilated for more than 24 hours (IHI 2008: 1-26).

The WHO also recommends pre-operative whole-body bathing or showering as it is considered good clinical practice to make the skin as clean as possible prior to surgery in order to reduce the bacterial load, especially at the site of incision (WHO 2016a: 60). This is generally done with an antimicrobial soap (usually CHG 4% combined with a detergent or in a triclosan preparation) in settings where this is available and affordable. If SSI rates are to serve as a quality indicator and comparison with benchmarks for healthcare facilities, countries and the public, they must be determined in a reliable way that produce robust infection rates to ensure valid comparisons (WHO 2016a: 33).

The results of this study showed that the above evidenced based standard is inadequately checked during relicensing inspections, but that the hospitals have risk assessment tools, policies and procedures guiding such practices.

Some of the above evidence-based practices may be achieved through the implementation of risk management policies and procedures while striving to maintain a fair and just organisational culture in healthcare organisations. The processes for identifying, assessing, reviewing and reporting clinical risks at most organisations are detailed through organisational policies such as sentinel event policy, risk management policy, incident reporting policy, and medication incident reporting policy. The data is obtainable from the incidents reported to the quality and patient safety department using a severity assessment code matrix to ensure that a standardised, objective measure of severity is allocated to each incident or near miss. This enables an appropriate level of investigation to be conducted as advocated by most quality advisory institutions (Hwang, Lee and Park 2013: 300-307). Greater management involvement is important to quality and patient safety. Research has shown that executive involvement in quality significantly improves quality and patient safety initiatives in organisation (Thomas *et al.* 2005: 8).

### **Objective 3: Development of an audit tool to assess quality and patient safety standards for regulatory relicensing inspections in private hospital in eThekweni district**

The result of the study clearly indicated that an auditable clinical tool is required for eThekweni private hospitals relicensing inspection. Based on the findings of the study and the conceptual framework, the researcher set out to develop a clinical audit tool for relicensing inspection for private hospitals in eThekweni district.

## **8.7 RECOMMENDATIONS FROM THE PARTICIPANTS**

Some of the criteria most frequently requested during the qualitative and quantitative phases of the study were national protocols on minimum nursing staffing ratios, evidence-based best clinical practice guidelines and data bases to benchmark, track and trend performance and facilities management. These were some of the concerns that the researcher noted during the study as the outliers to the conceptual framework of the NCS and the Batho Pele principles and are discussed below:

### **8.7.1 Nurse to patient ratios**

The issue of nurse to patient ratios is a global challenge and has been extensively debated. There seems to be a direct correlation between the number of nurses and the quality of nursing care that an institution is able to provide. However, the South African health system finds itself in a predicament due to a combination of dwindling numbers of nurses which is a trend in most developing countries while at the same time there is a steadily increasing disease burden (Adams and Kennedy 2006: 1-2). One of the largest contributing factors to the shortage of nurses in South Africa was the government's closure of a number of nursing colleges in the 1990s. According to Watson (2015: 1) in 2014 the number of professional nurses per 100 000 in South Africa was 121, roughly in line with other countries such as India (114), China and Brazil but falling far behind the Russian Federation (745). The

number of nurses is substantially lower compared to developed countries, for instance the United Kingdom (824) and Switzerland (1660). Furthermore, in South Africa there is currently no regulated staffing model to mandate nursing staff ratios and unions such as Solidarity and the Democratic Nursing Organisation of South Africa are calling for flexible but legally enforceable nurse: patient ratios to reduce 'burn-out' resignations, to reverse nurse emigration trends and to boost training outputs (Bateman 2009: 550-568). In 2008, the SANC population-based figures revealed a current ratio of one registered nurse for every 550 people. When one includes the country's refugees and illegal immigrants the ratio changes to one registered nurse per 621 people. In public hospitals ratios range from as high as one nurse per 18 patients to as low as one in 44, with anecdotal evidence from the Eastern Cape suggesting that it has reached 1:50 in some general wards and 1:10 in some postnatal wards (Bateman 2009: 550-568). In 2007, at its 52<sup>nd</sup> Conference in Polokwane, the African National Congress called for the implementation of a NHI scheme and at this meeting also called for a dramatic increase in the training of professional nurses and enrolled nursing assistants. Further priorities are re-opening of nursing colleges, and the use of incentives to encourage nurse tutors and experienced clinical nurse supervisors (retired or working in another field) to return to the profession. A new model for human resources that includes sufficient numbers and an appropriate skills mix of personnel is urgently required if a NHI scheme is to be feasible and be able to improve healthcare for South Africa's people (Lloyd, Sanders and Lehmann 2010: 176).

### **8.7.2 Nursing productivity models**

Efforts to improve the efficiency of delivery of nursing care have also led to the development and application of a number of nursing productivity systems that attempt to quantify patients and nurses' activities, identify optimal nurse to patient ratios, and measure costs. Nursing productivity systems based on patients' acuity, ratio of nursing care, fair allocation of resources, and nursing workload have been developed (Kohr, Hickey and Curley 2012: 420-431). In



Australia, the Victorian model and in America the Californian model have been implemented as a guide to staffing ratios. The Victorian model designates the in-charge nurse as 'floating' to be able to deal with emergent situations but this also leads to better adaptability when applied. The more rigid nurse: patient model introduced in California led to the closure of some private hospitals because they could not operate at the legally required levels prompting fierce debate. It also led to perversities in emergency rooms where patients with immediate life-threatening conditions and trauma were turned away or told to wait because admitting them would cause a lapse in ratios (Bateman 2009: 550-568). However, it has been reported that with both the California and Victoria models there has been a reversal of nursing shortages, emigration trends and nurses withdrawing from active practice (Bateman 2009: 550-568).

In a study in 2008, an overview of the nurse population ratios in different countries and regions of the world highlighted considerable variations, with Africa and South East Asia having the lowest average ratios of nursing staff. The paper further argued that the shortage of nurses is not necessarily a shortage of individuals with nursing qualifications; it is a shortage of nurses willing to work in the present conditions. The causes of shortages are multifaceted, and there is no single global measure of their extent and nature. There is growing evidence of the impact of relatively low staffing levels on healthcare delivery and outcomes. The main causes of nursing shortages were highlighted as inadequate workforce planning and allocation mechanisms, resource constrained undersupply of new staff, poor recruitment, retention and return policies, and ineffective use of available nursing resources through inappropriate skill mix and utilisation, poor incentive structures, and inadequate career support (Buchan and Aiken 2008: 3262- 3268). The world has entered a critical period for human resources for health. The scarcity of qualified health personnel, including nurses, is being highlighted as one of the biggest obstacles to achieving health system effectiveness. Nurses are the main professional component of the front-line staff in most health systems, and their contribution is recognised as essential

to meeting development goals and delivering safe and effective care (Buchan and Aiken 2008: 3262-3268).

The American Association of Critical Care Nurses Synergy Model was first described in 1998 to link certified practice to patient outcomes. The underlying tenet of the Synergy Model is that each patient and family brings to the healthcare situation certain characteristics that will affect the nursing care required to best meet their needs. When the needs and characteristics of the patient and the patient's family are matched to a nurse's competence, synergy results and better outcomes for patients can be expected. The Synergy Model describes eight patient and family dimensions that span a continuum of health and illness: stability, complexity, predictability, resiliency, vulnerability, participation in decision-making, participation in care, and resource availability. In a study in 2015, the authors suggested that applying the Synergy Model as a basis for nursing care was effective in increasing patient satisfaction and in the performance of nurses of cardiac intensive care units (Khalifehzadeh, Jahromi and Yazdannik 2015: 16).

In 2011, at a Nursing Summit, the Nursing Education Association (NEA) urged the National Department of Health to develop staffing norms and to fund and fill vacant nursing posts. Guidelines for the number of nurses who should be employed in a healthcare institution and in the community are essential for safe patient care and healthcare planning. Traditionally, population-based norms were used to determine this. However, the WHO now recognises that activity-based norms may be a more effective method of determining staffing needs for health as they account for numbers of patients, types and location of services which determines the number of nurses and the skills mix required (Republic of South Africa 2013b: 26-31). The 'nurse to patient' ratio ultimately determines the nurse's workload, job satisfaction and the effectiveness of care, and correlates with mortality rates in hospitals and other nurse sensitive indicators. South Africa does not have a legislated staffing norm. The Ministerial Task Team proposed that South Africa adopts a combination of

population-based norms and the WHO activity based-workload approach to determine safe staffing norms (Republic of South Africa 2013b: 26-31).

### **8.7.3 Management involvement**

In healthcare organisations, management must set the tone for organisational and patient safety culture in their organisations (Pronovost and Vohr 2010: 96). Annual patient safety culture surveys have an impetus for improving quality and patient safety in healthcare organisations (Sexton 2004: 5; Thomas *et al.* 2005: 8). Effective communication between the staff on the ward level and management in the organisation is an important aspect of patient safety. In high-risk areas such as operating theatres and intensive care units, the quality of human interaction is critical to minimising human errors. This can be achieved through briefings to plan daily activities as well as regular feedback (Sexton 2004: 5; Makary *et al.* 2006: 628-635; Pronovost *et al.* 2006: 1).

Daily monitoring of operating theatre briefings prior to skin incision, especially regarding patient identification, correct procedure and correct site, were found to be valuable communication channels between physicians and nurses (JCI 2008: 34). Vincent *et al.* (2004: 475-482) identified that surgical adverse events may be due to poor communication, bad operative techniques, malfunctioning or improperly used equipment, cognitive errors due to stress and inattention, all of which are compounded by resource and organisational problems. Managers must be visible, and executive walkabouts have been found to positively influence patient safety through direct interaction by leadership with staff (Thomas *et al.* 2005: 8). Today senior leaders in healthcare organisations should join clinicians at unit level in safety initiatives such as comprehensive unit based safety programmes (CUSP) where staff can see how senior executives embrace problems and facilitate solutions (Pronovost and Vohr 2010: 96).

The strengthening of nursing through increasing the number of nurses globally with adequate nurse education and training, leadership development and leadership roles with greater involvement in policy making, will have a triple impact on better healthcare for all citizens globally. The triple impact of nursing will promote better and safe healthcare, greater gender equality and improve the economies of countries making universal health care coverage more accessible to the citizens of the country (WHO 2016b: 1-68).

Continuous quality improvement and patient safety relies on initiatives to implement good practice projects as seen recently in the public sector in South Africa. Projects that aim to explore the extent of creativity and innovation that healthcare institutions undertake and share lessons learned are to be encouraged. Documenting and sharing of good practices has globally been seen to stimulate and improve programme design and delivery (Padayachee *et al.* 2013: 5-10).

## **8.8 SUMMARY OF THE CHAPTER**

This chapter discussed the results of the study. The results of the study suggested that the aims and objectives of the NCS and the Batho Pele principles are not fully established in terms of regulatory compliance in the private sector hospitals which participated in this study. There is also a lack of a common definition of quality and assessment across private healthcare organization investigated. There are no established benchmarks against which private health establishments have been assessed to date in identifying the gaps or appraising strengths in achieving compliance with the NCS. The next chapter discusses the development of a clinical audit tool for relicensing inspections for private hospitals in eThekweni district based on the NCS and the Batho Pele principles and on the results of this study.

## **CHAPTER 9: LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **9.1 INTRODUCTION**

The first objective of the study was to assess nursing staff perceptions regarding the current clinical audit tool used in relicensing inspections for private hospitals in eThekweni district in relation to the clinical domains of the NCS and the Batho Pele principles. The second objective was to assess the evidence-based best practice standards and its outcomes in selected private hospitals in eThekweni district and how these contributed to the delivery of quality healthcare to patients and users of the service. Based on the findings of the results of the study, the final objective was to develop an audit tool for relicensing inspection of private hospitals in eThekweni district.

In this chapter, the limitations of the study will be specified initially, as these could impact on the generalisation of the conclusions and/or the recommendations. Conclusions based on the results of the study will be presented and recommendations made for the implementation of an audit tool for relicensing inspections of private hospitals in eThekweni district.

### **9.2 LIMITATIONS OF THE STUDY**

Recent studies on a similar research topic related to public hospitals are not publicly available. However, the researcher was able to access the Department of Health, Baseline Audit report from 2012, conducted at public sector hospitals. This audit was conducted between May 2011 and May 2012, with funding from the National Department of Health, and every health facility in the public health sector was audited by a consortium of partners (Department of Health 2012: 1-77). The results of this report showed dismal results for the six fast tracked standards of the NCS. The overall objective of the audit was to collect baseline data from all public health facilities in the

country using standardised and existing measurement tools provided by the National Department of Health. The data collected were captured into the NCS database established by the National Department of Health. The audit found that the quality of services in public health facilities in South Africa collectively scored less than 50% compliance with vital measures in two out of the six ministerial priority areas. These measures included: patient safety and security (34%) and positive and caring attitudes (30%). The priority area of waiting times scored the highest compliance to vital measures at (68%). PHC facilities on average scored lower than hospitals in all priority areas (Department of Health 2012: 1). The baseline audit findings were presented according to the key audit outcome areas as determined by the NCS. The audits in the public sector hospitals and clinics limited the generalizability of the baseline findings to the private sector hospitals in eThekweni district where these types of audits have not yet commenced.

In Phase 1 (qualitative approach) of this study, a purposive sampling approach was employed involving senior nursing managers within a group of hospitals and did not include managers of other private hospital groups in eThekweni district. This could limit the generalizability of the findings to managers at other private hospitals or groups in eThekweni district regarding their perceptions of the current relicensing audit tool.

In Phase 2 (quantitative approach) of this study, the sample consisted of nurses who are in direct contact with patients. Professional nurses in the clinical areas are the shift leaders who always actively engage in assisting the auditors during the relicensing audits at unit level. The sample also included enrolled nurses and enrolled nursing assistants who were keen to participate, as they are also actively involved in the ongoing quality initiatives of their organisations and voluntarily participated in the study. Despite some of these limitations, the following conclusions could be drawn and recommendations made based on these conclusions.

### 9.3 CONCLUSIONS DRAWN FROM THE STUDY

In both the qualitative and quantitative phases of the study, the researcher identified key responses from the participants regarding the assessment of the current audit process for relicensing inspections in private hospitals in eThekweni district as well as the existence of best practice standards in their organisations in relation to the NCS and the Batho Pele principles. The conclusions drawn from both phases of the study will be presented as Phase 1 (Qualitative) and Phase 2 (Quantitative) conclusions. The conclusions related to the *qualitative phase* of the study and those linked to Objective 1 will be presented as internal and external factors in tables followed by a brief discussion. The conclusions from the *quantitative phase* will be presented in a table format representing the significant disagreements in relationship to Objective 1 and significant agreements in relationship to Objective 2 of the study, and relating them to the conceptual model chosen for the study which was based on the NCS and the Batho Pele principles.

#### 9.3.1 Phase 1 (Qualitative) Conclusion 1: Senior Nurse Managers lack confidence in the current relicensing inspection process

The results pertaining to this part of the study are discussed in depth in Chapter 5 of this thesis with the major themes and sub-themes in the qualitative phase illustrated in Table 5.2. The conclusions based on the results of the qualitative phase of the study revealed that senior managers lacked confidence in the current relicensing inspection process. Participants perceived the relicensing clinical audits as inconsistent with each visit as there is no clinical audit tool to guide the inspection process. The conclusions based on the results of the qualitative phase of the study also revealed inadequate checking of the clinical domains of Patient Rights, Patient Care and Clinical Support Services domains during relicensing inspections at the selected private hospitals in eThekweni district. Further inconsistencies were also identified by the participants regarding checking of the standards within each of the sub-domains. There were mixed responses to the interview questions from many of the participants. Many of the senior managers also related their

responses to their organisations quality process, in an attempt to link them to clinical domains of the NCS and the Batho Pele principles. Timeous feedbacks of major findings from the clinical relicensing audits were requested to be able to implement corrective actions. The need for objective feedback was highlighted by the participants in order to benchmark with other private hospitals in eThekweni district. The senior managers also expressed their enthusiastic support of an audit tool based on the NCS and the Batho Pele principles for relicensing inspections of private hospitals in eThekweni district.

#### 9.3.1.1 Phase 1 (Qualitative) Conclusion 1: There are certain internal and external factors influencing the lack of confidence in senior managers during relicensing inspections

The research findings concluded that various factors influence the senior manager's lack of confidence in the current relicensing process. This section focuses on the conclusions derived from the data obtained in the qualitative phase and makes recommendations according to the objectives of the study. Internal factors are those related to the internal work environment and external factors are those related to the government's national quality strategy. The analysis of internal and external factors contributing to the lack of confidence among senior managers during relicensing inspection and a lack of a common definition of quality and patient safety across the selected hospitals in eThekweni district has implications for the recommendations made in this chapter. The internal factor recommendations are intended to be resolved by senior management in the organisation and the external factor recommendations by the National Health Department in South Africa.



### 9.3.1.2 Phase 1 (Qualitative) Conclusion 1: Internal factors

Internal factors contributing to the lack of confidence in the current relicensing process are summarised in Table 9.1.

**Table 9.1 Phase 1: Conclusion 1: Internal factors**

<b>Factors contributing to the lack of confidence</b>	<b>Factors that could improve confidence</b>
Lack of management exposure to relicensing audits based on NCS and Batho Pele principles.	Internal audit procedures must incorporate aspects of the three clinical domains.
Ineffective communication between the teams.	Improve communication through regular quality forums.
Lack of timeous feedback regarding audits.	Improve feedback to the managers and provide constructive criticisms.
Inadequate preparations for audits.	Encourage continuous quality improvement and readiness for audits at all times.
Uncertainty of what is going to be checked.	Prepare for audits within the national audit guidelines.
Lack of experience of unit managers to conduct external audits.	Accompaniment and mentorship incorporated into leadership programmes.

Table 9.1 shows the internal factors contributing to the lack of confidence of senior managers with the current relicensing process. Most of the managers in the current relicensing process have very little or no contact with the auditors. The structural audit tool (R158) (Department of Health 1996: 1-59) requires safe minimum standards of structural compliance and prescribes patient safety as necessary. However, auditors routinely include clinical audits without measurement criteria together with the R158 structural relicensing inspections and this creates a fear of the unknown during these relicensing inspections, contributing to a lack of confidence among senior managers. Ineffective communication, ineffective feedback and the lack of experience of managers with clinical relicensing inspections further contributes to the feeling of uncertainty amongst senior management staff who have to endure the anticipation of failure or success related to an annual relicensing inspection.

### 9.3.1.3 Phase 1 (Qualitative) Conclusion 1: External factors

External factors contributing to the lack of confidence in the current relicensing process are summarised in the Table 9.2 below.

**Table 9.2: Phase 1: Conclusion 1: External factors**

<b>Factors contributing to the lack of confidence</b>	<b>Factors that could improve confidence</b>
Lack of a standardised audit tool with benchmarks.	Implement the National Audit tool for private sector relicensing inspections.
Audit not based on the NCS and the Batho Pele principles.	The NCS and Batho Pele principles framework of quality and patient safety to be applied to private sector hospitals.
Lack of consistency within the audits.	Provide standardised auditable checklists for clinical inspections to ensure consistency.
Lack of timeous and objective feedback.	Feedback in the form of a score rating identifying the high-risk areas while on site.
Combined structural and clinical audits.	Separate the R158 structural audit from the clinical audit.
The approach and attitude of audit staff	Friendly attitude will put staff at ease.
Not recognised as an educational opportunity.	Use the process as an opportunity to educate staff at all levels.

Table 9.2 shows that there are important external factors contributing to the lack of confidence of senior managers with the current relicensing process. The expectations of the regulator are unknown to the private sector in eThekweni district regarding clinical audits. Many managers recommended an audit tool for relicensing inspections based on the NCS and the Batho Pele principles. Feedback was requested immediately to correct high-risk clinical concerns gathered during the walkabout. An inspection report with objective feedback on the different levels of compliance obtained during the relicensing inspection will contribute to a feeling of accomplishment and avoid uncertainty.

Praise and recognition for teams performing well during the audits boost their morale and provide an example for others to follow. Benchmarking and learning from teams with high performance will build confidence in others.

External audit procedures must be seen by staff as routine checking procedures by friendly auditors which facilitate learning. Separate the structural R158 audits from the clinical audits to ensure quality time is spent during relicensing audits to update knowledge and for new learning to take place. Learning will be enhanced in a friendly and relaxed environment during relicensing inspections.

#### 9.3.2 Phase 2 (Quantitative) Conclusion 2: Objective 1: There is inadequate checking of the clinical domains during relicensing inspections of the selected private hospitals in eThekweni district

The results pertaining to this part of the study are discussed in detail in Chapter 5 of this thesis with significant agreements and disagreements in relation to the first two objectives of the study. The results of the study concluded that in relationship to Objective 1 of the study, there is inadequate checking of the Patient Rights, Patient Care and Clinical Support Services domains during relicensing inspection of the selected private hospitals in eThekweni district. The results also concluded that there are many inconsistencies in checking of the standards relating to the sub-domains of the NCS during relicensing inspections. The significant disagreements in relationship to *Objective 1* are illustrated in Table 9.3.

**Table 9.3: Conclusion 2: Objective 1: Significant Disagreements: Inadequate checking of the clinical domains by the auditors during relicensing inspections**

<b>PATIENT RIGHTS DOMAIN</b>
PR2. The assessment of information provided to patients by the auditors.
PR4. The assessment of continuity of care.
PR6. The assessment of emergency care.
PR5. The assessment of reducing delays in care.
<b>PATIENT CARE DOMAIN</b>
PC1. Morse falls risk assessment tool for the prevention of falls.
PC2. The Waterloo risk assessment tool for the prevention of pressure sores.
PC3. The Intravenous (IV) cannula bundle practice for the prevention of phlebitis.
PC4. Hang-time for antibiotics.
PC5. Chlorhexidine prewash before surgery.
PC6. Bundle practice for the prevention of SSI.
PC7. Bundle practice for the prevention of ventilator acquired pneumonia.
PC8. Bundle practice for the prevention of catheter associated UTI.
PC9. Bundle practice for the prevention of central line arterial blood stream infection.
PC10. Observation of the 5 Rs of medication administration.
PC12. Change of shift report using situation, background, assessment and recommendation (SBAR).
PC13. Adequate care and handling of sharps
PC14. Proper care and management of medical waste.
PC18. Safe administration of blood and blood products.
PC19. Timeous reporting of adverse events.
PC20. The following of time-out process for all invasive and surgical procedures.
PC21. Adherence to inter-hospital and inter-departmental transfer processes.
<b>CLINICAL SUPPORT SERVICES DOMAIN</b>
SS1. The checking of pharmacy related issues in the unit.
SS2. The checking of diagnostic services in the unit.
SS3. The checking of health technology services in the unit.
SS4. The checking of sterilisation services in the unit.
SS5. The checking of mortuary services in the unit.
SS7. The checking of therapeutic and support services in the unit.

Table 9.3 shows the significant disagreements related to Objective 1 of the study. The researcher is also aware that this list of policies and procedures relating to the clinical domains of the NCS is not exhaustive by any means and that (Table 9.3) reflects only the responses to questions in the survey.

9.3.2.1 Phase 2 (Quantitative) Conclusion 3: Objective 2: Best practice standards exist in the selected private hospitals in eThekweni district with good outcome for patients

The staff in the clinical units who participated in the survey concluded that best practice policies and procedures guide nursing practice within their units, with many showing positive responses to the overall quality of care in their hospitals, reporting culture, incident reporting and with overall care provided to patients, as discussed in Chapter 5 of this thesis. The results in this section of the study therefore supports Objective 2 of the study, concluding that best practice policy and procedures do exist in the selected private hospitals in eThekweni district who participated in the study, and this finding may be generalised to a larger population of private hospitals in eThekweni district. The significant agreements to the existence of best practices for the Patient Rights, Patient Care and Support Services domains are listed in Table 9.4.

**Table 9.4: Significant agreements that Best Practice Policies and procedures exist in the selected private hospitals in eThekweni district**

<b>PATIENT RIGHTS DOMAIN</b>
BPPR1. Applying the clinical domains of the NCS to improve quality and patient safety.
BPPR2. Observing the Batho Pele Principles during nursing practice.
BPPR3. Acknowledging that patients have rights and responsibilities.
BPPR4. Observing the hospital's mission statement in daily practice.
BPPR5. Being guided by the hospital's quality objectives.
BPPR6. Adhering to the Customer Complaints Policy.
BPPR7. Knowledge of the Basic Life Support Training Policy.
BPPR8. Adhering to the Staff Dress Code Policy.
BPPR9. Adhering to the Patient Identification Policy.
BPPR10. Adhering to the Patient Consent Policy.
BPPR11. Taking care of the patients' property and valuables.
BPPR12. Applying the Triage Policy.
BPPR13. Implementing the Resuscitation Policy.
BPPR14. Applying the Patient Restraint Policy.
BPPR15. Ensuring that patients receive a discharge summary.
BPPR16. Ensuring that service operating times and visiting hours are observed.
<b>PATIENT CARE DOMAIN</b>
BPPC1. Using Morse falls risk assessment tool for the prevention of falls.
BPPC2. Using Waterloo risk assessment tool for the prevention of pressure sores.
BPPC3. Using IV cannulation bundle practice for the prevention of phlebitis.
BPPC4. Using hang-times for antibiotics (Antibiotic Stewardship).
BPPC5. Using chlorhexidine prewash before surgery.
BPPC6. Using bundle practice for the prevention of SSIs.
BPPC7. Using bundle practice for the prevention of ventilator acquired pneumonia.
BPPC8. Using bundle practice for the prevention of catheter associated UTIs.
BPPC9. Using bundle practice for the prevention of central line arterial blood stream infection.
BPPC10. Using the 5 Rs of medication administration in daily practice.
BPPC11. Using the six international patient safety goals in daily practice.
BPPC12. Using change of shift report with SBAR.
BPPC13. Observing the handling of sharps and prevention of needle stick injuries.
BPPC14. Observing the guidelines for proper care and management of medical waste.
BPPC15. Observing the principles of infection control and standard precautions.
BPPC16. Observing the principles of hand hygiene consistently.
BPPC17. Reporting of daily environmental risks.
BPPC18. Applying the principles of breast-feeding.
BPPC19. Reporting of adverse events timeously.
BPPC20. Applying the principles of clinical risk management.

BPPC21. Applying the sentinel event policy requirements when necessary.
BPPC22. Understanding the requirements of the Staff Education Policy.
BPPC23. Using the time-out procedure to identify patients before any invasive or surgical procedure.
BPPC24. Using the Guidelines of the Blood Transfusion Policy.
BPPC25. Following the inter-hospital and inter-departmental transfer processes.
<b>CLINICAL SUPPORT SERVICES DOMAIN</b>
BPSSI. Adhering to the Narcotic Drug Control Policy.
BPSS2. Adhering to the Medication Error Reporting Policy.
BPSS3. Adhering to the radiation protection policy.
BPSS4. Adhering to the Blood and Blood Product Administration Policy.
BPSS5. Maintaining critical asset registers for service records.
BPSS6. Using the sterilisation process protocols.
BPSS7. Using policies and procedures to guide all aspects of storage, removal and transportation of the deceased.

Table 9.4 shows the significant agreements related to Objective 2 of the study. The researcher is also aware that the list of policies and procedures relating to best practices in the clinical domains of the NCS is not exhaustive by any means and that Table 9.4 reflects only the responses to questions in the survey.

## 9.4 RECOMMENDATIONS OF THE STUDY

Recommendations for both phases of the study stem from the results of the study in Chapter 5, suggesting that attention be paid to each of the standards in the NCS and the Batho Pele principles during relicensing inspections. Recommendations that the researcher further proposes in this section are based on actions on three fronts: management responsibility, education and training, and operational. It is important that the three levels of hierarchy co-operate to put systems and processes into place to implement the National Quality Framework of the NCS and Batho Pele principles. Strategies for monitoring, evaluation and feedback are important and these should be in place at all levels. Communication between the three levels and with relevant stakeholders that is the National Department of Health in eThekweni district is important. More importantly, it is necessary to create a positive organisational

culture and workforce that is committed to strengthening the national quality framework in the eThekweni district.

#### **9.4.1 Implementation of the modified audit tool**

All private hospitals in eThekweni district should begin with creating an understanding of what needs to be done and how it should be done by conducting a situational analysis. This should entail comparing their current practices with requirements according to the NCS and Batho Pele principles. The process should create an understanding of standards that should be retained and strengthened in the current practice. All standards related to the NCS and the Batho Pele principles framework that is missing in the current practice should be identified as standards that need to be introduced.

Introducing change needs to be done gradually otherwise resistance to change could occur. Change management (even healthy changes) involve discomfort, uncertainty and conflict. The researcher recommends that, in order to minimise resistance, a careful and phased-in approach to change be implemented, and an open trusting environment be cultivated during the implementation of any change process. Everything that needs to be done should be ranked according to priority, beginning with the most important aspects. Strategies should, thereafter, be developed regarding the transition process to facilitate moving from the current to the ideal state. The next step should be the implementation phase, during which implementation of the NCS and the Batho Pele principles should be done according to the National Quality Policy of South Africa. Strategies for monitoring and evaluation should also be put in place. It is important that all relevant stakeholders be involved and informed so as to gain their inputs and co-operation.

#### **9.4.2 Management responsibility**

Senior management need to stay abreast of the latest developments in quality and patient safety and keep their teams updated regarding the requirements of best practices and the government's quality initiatives. Leaders and



managers must take heed of the national policies and communicate this to the operational levels of the organisation by making resources available to them and implementing changes for all relevant stake holders. Managers must keep abreast of the latest technology to ensure staff develop skills like using electronic medical records, medication bar coding, protocols for common procedures, and checklists. The organisation benefits from creating an effective safety culture in which personnel feel comfortable disclosing errors including their own, while maintaining professional accountability. Building a blame free environment is crucial if patient safety programmes are to succeed. In order to commit to an organisational-wide culture of safety the use of a patient safety culture survey is recommended to assess and implement corrective actions, at least on an annual basis. It is imperative that patient safety and a culture of change be driven by senior leaders in the organisations.

#### **9.4.3 In-service education and skills development**

As found in the current study, many senior and junior staff members lacked confidence in understanding the requirements of relicensing inspections. The staff in this study were all qualified nurses in their respective units of operation who would benefit from continuous in-service training in order to improve their understanding and performance and to keep them abreast with the current development in their practice. It is the responsibility of the education department in every organisation to integrate the NCS and the Batho Pele principles into the daily practice and into in-service education and to regularly conduct internal audits using measurable tools with feedback to staff and the instituting of corrective measures until staff are confident enough to understand the requirements of the National Audit Tool. Teaching in nursing colleges should include the NCS and the Batho Pele principles in the curriculum thereby introducing it from the very first year of a student's nursing career. Introducing the National Quality System and the National audit strategy into the early years of nursing students will prepare them to work effectively as newly qualified nurses with greater confidence.

#### **9.4.4 Operational level**

Unit Managers must take the lead in implementation of the NCS and the Batho Pele principles at unit level. The findings of the current study highlighted the need to put systems into place in support of the NCS and the Batho Pele principles at ward level as discussed in the study. Support is required from senior management staff and education and training departments to ensure that the initiatives of government are always adopted and understood by staff. The proposed audit tool in this study can be seen as a learning tool for the implementation of the NCS and the Batho Pele principles at private hospitals in eThekweni district. The researcher also recommends that Unit Managers perform frequent internal mock drills using the proposed audit tool to build confidence and be in a state of readiness for unannounced external audits by the regulator.

#### **9.4.5 Forging public and private sector partnerships to improve patient care**

It is important that the public and private sector hospitals in eThekweni district follow a common set of standards of quality and patient safety standards in South Africa. Strategies for monitoring, evaluation and feedback are important and these should be in place at and between all levels of government. Projects such as the Patient Complaint Response System, Advanced Incident Management System, Programme to Reduce Patient Waiting Times, Hospital Cleanliness Programme, and Hospital Quality Assurance System can be shared between private and public sector hospitals. Communication between the public and private sector and with other relevant stakeholders must be improved. Decision-makers, health professionals and communities need to be able to find, use and share knowledge on experiences of what works and the lessons learned in a positive organisational culture. A commitment to work together within the public and private sector should be strengthened in the eThekweni district thereby forging valuable relationships for the health and safety of our citizens as healthcare moves towards NHI.

#### **9.4.6 Further research**

It is recommended that future researchers on the topic engage in a broader study involving other private hospitals and groups in eThekweni district. Performing research of this nature will develop baseline findings of what eThekweni private hospitals have to offer and this may be the start of setting up an integrated quality and infection control forum and other networks in eThekweni district thus creating a centralised data base for hospitals to benchmark their quality scorecards, learn new ideas and implement best practices to render safe quality care. Further research on the evaluation of the audit tool developed is also highly recommended

### **9.5 CONCLUSION**

The National Department of Health advocated the implementation of the National Quality System as a quality improvement strategy in an attempt to improve quality and patient safety in all healthcare organisations in South Africa with a common definition of quality. The NCS and the Batho Pele principles must be considered as the cornerstone for improving quality and patient safety by private as well as public sector healthcare organisations. The sharing and development of policies and protocols to strengthen health services at national level must include the contributions of the private sector who have much to offer in a quality system for all citizens in South Africa. Coming together and sharing valuable resources can assist in addressing some of the identified gaps in the healthcare system in South Africa. The strength and opportunities from both sectors can be utilised as pillars to build on and improve the quality of our health services. The findings of this study can also be used to inform evidence-based objectives and plans towards scaling up national quality improvement strategies in private sector healthcare organisations in the future. The proposed audit tool for relicensing inspection to assess quality and patient safety may be a useful tool to ensure future successful inspections at private hospitals in eThekweni district as well as other districts in KZN province.

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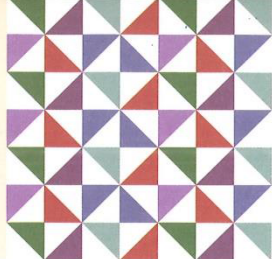

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# **APPENDICES**

## Appendix 1: University Ethics clearance



**Institutional Research Ethics Committee**  
Faculty of Health Sciences  
Room MS 49, Mansfield School Site  
Gate 8, Ritson Campus  
Durban University of Technology  
P O Box 1334, Durban, South Africa, 4001  
Tel: 031 373 2900  
Fax: 031 373 2407  
Email: lavishad@dut.ac.za  
[http://www.dut.ac.za/research/institutional\\_research\\_ethics](http://www.dut.ac.za/research/institutional_research_ethics)  
[www.dut.ac.za](http://www.dut.ac.za)

14 September 2016

IREC Reference Number: **REC 113/16**

Ms J Chellan  
11-41<sup>st</sup> Avenue  
Umhlatuzana Township  
Durban  
4092

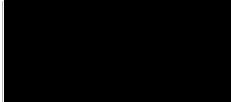
Dear Ms Chellan

**An audit tool for relicensing inspection to assess quality and patient safety in eThekweni private hospitals**

The Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letters.

Please note that Full Approval is granted to your research proposal. You may proceed with data collection.

Yours Sincerely,



Professor J K Adam  
Chairperson: IREC



2016-09-14

INSTITUTIONAL RESEARCH ETHICS COMMITTEE  
P O BOX 1334 DURBAN 4000 SOUTH AFRICA

## Appendix 2a: Letter of permission to the Group Manager

11-41<sup>st</sup> Avenue  
Umhlatuzana Township  
Durban  
4092

Mr. Vishnu Rampartab  
Group General Manager  
Joint Medical Holdings  
83 Ismail Meer Street  
Durban  
4001

Dear Mr. Rampartab

### PERMISSION TO CONDUCT A RESEARCH STUDY

I am currently a student at the Durban University of Technology pursuing a Doctor in nursing degree, hereby request to undertake a study. The proposed title of my study is '*An audit tool for relicensing inspection to assess quality and patient safety in eThekweni private hospitals*'. This is a sequential mixed method study and will involve nurse managers, unit managers and nursing staff that work at City Hospital, Isipingo Hospital, Durdoc Hospital and Ascot Park Hospital of Joint Medical Holdings Group. The data collection in the qualitative phase will be by a structured interview guide as well as a structured questionnaire during the quantitative phase of the study. The study poses no risks of any kind to the participants and the organisation as the aim of this study is to assess the perceptions of quality of healthcare rendered to patients in private hospitals and to develop an audit tool for assessing quality and patient safety standards for regulatory relicensing inspections in eThekweni District. Participation will be voluntary and informed consent will be obtained.

Please find herewith a copy of my research proposal. The supervisor of this project is Prof M.N. Sibiya and could be contacted on 031-373 2606, [nokuthulas@dut.ac.za](mailto:nokuthulas@dut.ac.za).

Sincerely,

.....

Mrs J. Chellan (D Nursing Candidate)

## Appendix 2b: Approval letter from the Group Manager



**JOINT MEDICAL HOLDINGS PROPRIETARY LIMITED**

Registration No. 97/10001/06

83 Lorne Street  
Durban, 4001  
P O Box 48143  
Qualbert, 4078  
Fax : (031) 309 1401 (Management)  
Tel : (031) 314 3010 (Management)

**Subsidiaries:**

City Hospital	(031) 3143000
Durdoc Hospital	(031) 3275100
Isipingo Hospital	(031) 9137000
Maxwell Clinic	(031) 3143000
Ascot Park Hospital	(031) 3748000
Gandhi Mandela Nursing. Academy	(031) 3093094
Citi-Med Ambulance	(031) 3091524
Toll Free	0800 333 911

6 September 2016

Mrs J Chellan  
Group Nursing Services Manager  
JMH Group

Dear Mrs Chellan

### REQUEST FOR APPROVAL TO CONDUCT PHD STUDY AT JMH HOSPITALS

We acknowledge receipt of your request for approval to undertake the above survey at JMH Hospitals.

Approval is hereby granted for the above survey to take place once full IREC approval has been received.

We further acknowledge receipt of the following approved documents:

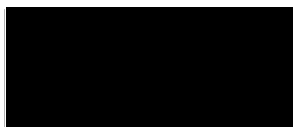
1. Interview guide
2. Provisional IREC approval
3. Consent and information letters to participants

The above documents has been noted by the JMH Standards and Ethics Committee for information and records.

We trust that this is in order.

Thanking you

Yours faithfully



**DR RL BHOOLA**  
**CHAIRMAN**



**VISHNU RAMPARTAB**  
**GROUP GENERAL MANAGER**



*Directors: Dr R L Bhoola; Dr M Kesaru; Mr J S Vawda; Mr P Rajaruthnam; Dr J W Thabethe; Dr T M Reddy; Dr M J Grootboom;  
Dr N C Mabaso; Mr M Moodley; Ms T D Mdululi*



### Appendix 3a: Letter of permission to the Hospitals Ethics Committee

11-41<sup>st</sup> Avenue  
Umhlatuzana Township  
Durban  
4092

Prof. M. Adhikari  
Chairman Ethics and Standards Committee  
Joint Medical Holdings  
83 Ismail Meer Street  
Durban  
4001

Dear Prof Adhikari

#### PERMISSION TO CONDUCT A RESEARCH STUDY

I am currently a student at the Durban University of Technology pursuing a Doctor in nursing degree, hereby request to undertake a study. The proposed title of my study is '*An audit tool for relicensing inspection to assess quality and patient safety in eThekweni private hospitals*'. This is a sequential mixed method study and will involve nurse managers, unit managers and nursing staff that work at City Hospital, Isipingo Hospital, Durdoc Hospital and Ascot Park Hospital of Joint Medical Holdings Group. The data collection in the qualitative phase will be by a structured interview guide as well as a structured questionnaire during the quantitative phase of the study. The study poses no risks of any kind to the participants and the organisation as the aim of this study is to assess the perceptions of quality of healthcare rendered to patients in private hospitals and to develop an audit tool for assessing quality and patient safety standards for regulatory relicensing inspections in eThekweni District. Participation will be voluntary and informed consent will be obtained.

Please find herewith a copy of my research proposal. The supervisor of this project is Prof M.N. Sibiya and could be contacted on 031-373 2606, [nokuthulas@dut.ac.za](mailto:nokuthulas@dut.ac.za)

Sincerely,

.....  
Mrs J. Chellan  
D Nursing Candidate

## Appendix 3b: Approval letter from the Hospitals Ethics Committee

**JOINT MEDICAL HOLDINGS PROPRIETARY LIMITED**  
Registration No. 97/10001/06

83 Lorne Street  
Durban, 4001  
P O Box 48143  
Qualbert, 4078  
Fax : (031) 309 1401 (Management)  
Tel : (031) 314 3010 (Management)

**Subsidiaries:**  
City Hospital (031) 3143000  
Durdoc Hospital (031) 3275100  
Isipingo Hospital (031) 9137000  
Maxwell Clinic (031) 3143000  
Ascot Park Hospital (031) 3748000  
Gandhi Mandela Nursing. Academy (031) 3093094  
Citi-Med Ambulance (031) 3091524  
Toll Free 0800 333 911

6 September 2016

Mrs J Chellan  
Group Nursing Services Manager  
JMH Group

Dear Mrs Chellan

### REQUEST FOR APPROVAL TO CONDUCT PHD STUDY AT JMH HOSPITALS

I read with interest your PhD proposal entitled 'An audit tool for relicensing inspection to assess quality and patient safety in eThekwin private hospitals'.

I have read through the proposal which is a very important study to undertake. It creates the opportunity for the tool to be used in many hospitals.

You have included all the relevant documents including the IREC approval from DUT.

I would strongly support your study.

Sincerely



**MIRIAM ADHIKARI**  
PROFESSOR EMERITUS  
CHAIRPERSON: JMH STANDARDS AND ETHICS COMMITTEE



*Directors: Dr R L Bhoola; Dr M Kesaru; Mr I S Vawda; Mr P Rajaruthnam; Dr J W Thabethe; Dr T M Reddy; Dr M J Grootboom;  
Dr N C Mabaso; Mr M Moodley; Ms T D Mduli*



#### **Appendix 4a: Letter of information**

Thank you for agreeing to participate in this study. Your input is highly appreciated.

**Title of the Research Study: An Audit Tool for relicensing inspection to assess quality and patient safety in eThekweni private hospitals**

**Principal Investigator/s/researcher:** Ms J. Chellan, M Cur.

**Co-Investigator/s/supervisor/s:** Prof M.N. Sibiya, D Tech: Nursing (Supervisor), Prof R. Bhagwan, PhD (Co-supervisor).

**Brief Introduction and Purpose of the Study:** You are cordially invited to participate in a research study as entitled above. The aim of the study is to assess the perceptions of nursing staff on the quality of healthcare rendered to patients in private hospitals and to develop an audit tool for assessing quality and patient safety standards for regulatory relicensing inspections in eThekweni District. As nurses charged with driving quality and patient safety in private hospitals, you form part of the rich source of information required to complete this study.

**Outline of the Procedures:** You are kindly requested to participate on one-to-one interview. I will personally conduct the interview and it will last between 20-30 minutes. I will ask you few questions on your experiences regarding relicensing inspections. A private room will be organised at each study site to use for the interviews in order to ensure that the interviews are conducted in a suitable environment. I kindly request to use a voice recorder to capture the interview discussion.

**Risks or Discomforts to the Participant:** There are no risk envisaged in this study as only information about your views on quality and patient safety will be sought.

**Benefits:** Please note that such an undertaking is on a voluntary basis and thus you will not receive any payment or gifts for your participation. However, you may have access to the publication on completion of the study. This study intends to offer new knowledge on the topic of relicensing inspections of private hospitals in eThekweni district. It identifies the experiences and perceptions of nursing staff with current regulatory relicensing processes and takes into account their recommendations for improvement in line with national audit standards. The findings will create awareness for the need for standardised relicensing processes in order to improve quality and patient safety for private hospitals in eThekweni district.

**Reason/s why the Participant May Be Withdrawn from the Study Remuneration:** You may decide to withdraw from this study at any time by advising the researcher, and may do so without any penalty.

**Costs of the Study:** You will not be expected to pay or receive remuneration for participation in the study.

**Confidentiality:** All information you provide is considered completely confidential; your name will not be included or in any other way associated, with the data collected in the study. Furthermore, because the interest of this study is in the average responses of the entire group of participants, you will not be identified individually in any way in any written reports of this research. Confidentiality will be maintained by keeping the consent form separate from the questionnaire so that it could not be used to identify the participants. The completed and returned questionnaires will be kept in a safe drawer under lock and key in the researchers' office to which only the researcher associated with the study will have access. After the research project is fully completed research data will be destroyed after a period of 5 years.

**Research-related Injury:** There are no risks attached to this study.

**Persons to Contact in the Event of Any Problems or Queries:**

Should you have any queries you may contact my Supervisor Prof. M.N. Sibiya on 031-373 2704. You may also contact the researcher, Ms J. Chellan on 074 475 5773 or the Institutional Research Ethics administrator on 031-373 2900. Complaints can be reported to the Director: Research and Postgraduate Support, Prof S Moyo on 031 373 2577 or [moyos@dut.ac.za](mailto:moyos@dut.ac.za)



## Appendix 4b: Consent

### Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Mrs Jamila Chellan about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: \_\_\_\_\_,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____	_____	_____	_____
<b>Full Name of Participant Thumbprint</b>	<b>Date</b>	<b>Time</b>	<b>Signature / Right</b>

I, Mrs Jamila Chellan (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_____	_____	_____
<b>Full Name of Researcher</b>	<b>Date</b>	<b>Signature</b>

_____	_____	_____
<b>Full Name of Witness (If applicable)</b>	<b>Date</b>	<b>Signature</b>

_____	_____	_____
<b>Full Name of Legal Guardian (If applicable)</b>	<b>Date</b>	<b>Signature</b>

## **Appendix 5: Interview guide**

### **PART A**

#### **Demographic data**

Participant No:

Date: .....

Age: ..... Gender: .....

Race: ..... Years of experience..... Position held.....

Hospital..... Unit .....

### **PART B**

The domain of Patient Rights in the National Core Standards sets out what a hospital or clinic must do to make sure that patients are respected and their rights upheld, including getting access to needed care and to respectful, informed and dignified attention in an acceptable and hygienic environment, seen from the point of view of the patient and in accordance with Batho Pele Principles.

#### **Main question**

In your opinion, does the clinical annual relicensing inspection by the Department of Health for private hospitals include aspects listed above as related to the clinical domain of the NCS and Batho Pele Principles? Explain.

#### **Probing question**

In your opinion, do these measures add up to the patient rights sub-domain of:

- Respect and dignity
- Information to patients
- Physical access
- Continuity of care
- Reducing delays in care
- Emergency care
- Access to package of services
- Complaints management

If not, what are your recommendations for inclusion in the patient rights sub-domain during relicensing inspections?

### **PART C**

The Patient Safety, Clinical Governance and Clinical Care domain of the National Core Standards covers how to ensure quality nursing and clinical care and ethical practice; reduce unintended harm to healthcare users or patients in identified cases of greater clinical risk; prevent or manage problems or adverse events, including health care-associated infections; and support any affected patients or staff.

#### **Main question**

In your opinion does the clinical annual relicensing inspection by the Department of Health for private hospitals include any of the above aspects related to the clinical domain of the NCS and Batho Pele Principles? Explain.

#### **Probing question**

In your opinion, do these relate to the Patient Safety, Clinical Governance and Clinical Care sub-domain of:

- Patient care
- Clinical management for improved health outcomes
- Clinical leadership
- Clinical risk
- Adverse events
- Infection prevention and control

If not, what are your recommendations for inclusion in the Patient Safety, Clinical Governance and Clinical Care sub-domain in the relicensing inspections?

### **Part D**

The Clinical Support Services domain of the National Core Standards covers specific services essential in the provision of clinical care and includes the timely availability of medicines and efficient provision of diagnostic, therapeutic and other clinical support services and necessary medical technology, as well as systems to monitor the efficiency of the care provided to patients.

**Main question**

In your opinion, does the clinical annual relicensing inspection by the Department of Health for private hospitals include any of the above aspects related to the clinical domain of the NCS and Batho Pele Principles? Explain.

**Probing question**

In your opinion do these relate to the Clinical Support Services sub-domain of:

- Pharmaceutical services
- Diagnostic services
- Therapeutic and support services
- Health technology services
- Sterilisation services
- Mortuary services
- Efficiency management

If not, what are your recommendations for inclusion in the Clinical Support Services sub-domain in the relicensing inspections?

NB: The questions will be guided and supported by probing where necessary so that the researcher can get clarity on information given.



## Appendix 6: Questionnaire

### INSTRUCTION

This survey asks for your opinions about the quality and patient safety issues that are checked during the Department of Health Annual Relicensing Inspections in your hospital. This questionnaire will take about 15 to 20 minutes to complete.

- Please attempt to answer each question to the best of your ability.
- Please select **ONE** answer for each statement and mark with an **X** in the selected box.
- Please do not write your name on the questionnaire

### SECTION A: DEMOGRAPHICS

#### 1. What is your staff position in this hospital?

Professional Nurse	
Enrolled Nurse	
Enrolled Nursing Assistant	

#### 2. How long have you worked in this hospital? Mark with an X

Less than a year	
1 to 5 years	
6 to10 years	
11 to15 years	
16 to 20 years	
21 years or more	

#### 3. Which unit do you work in? \_\_\_\_\_

#### 4. How long have you worked in your current unit?

Less than a year	
1 to 5 years	
6 to10 years	
11 to15 years	
16 to 20 years	
21 years or more	

#### 5. Typically, how many hours per week do you work in this hospital?

40 to 59 hours per week	
60 to 79 hours per week	
80 to 99 hours	
100 hours per week or more	

#### 6. How long have you worked in your profession?

Less than a year	
1 to 5 years	
6 to10 years	
11 to15 years	
16 to 20 years	
21 years or more	

## **SECTION B: ASSESSMENT BY THE AUDITOR**

### **1. PATIENT RIGHTS DOMAIN**

Indicate your agreement that the following aspects of patient rights have been adequately assessed by the auditors during the relicensing inspection:

<b>Aspects of patient rights</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Neutral</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1. Treating patients with respect and dignity.							
2. Giving information to the patients regarding their treatment.							
3. Ensuring safe access for the disabled.							
4. Giving patients' information regarding referrals and specialist appointments.							
5. Managing waiting times for patients in order to improve patient satisfaction and care.							
6. Treating and stabilising emergency patients before transfer if needed.							
7. Providing services that meet National Guidelines for Hospitals							
8. Having a Complaints Management Policy in place.							

## **2. PATIENT CARE DOMAIN**

Indicate your agreement that the following aspects of the patients care domain have been adequately assessed by the auditors during the relicensing inspection:

<b>Aspects of patient care</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Neutral</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1. Morse Falls risk assessment for the prevention of falls.							
2. The Waterloo risk assessment tool for the prevention of pressure sores.							
3. IV cannulation bundle practice for the prevention of phlebitis.							
4. Hang-times for antibiotics.							
5. Chlorohexidine prewash before surgery.							
6. Bundle practice for prevention of SSIs.							
7. Bundle practice for the prevention of ventilator acquired pneumonia.							
8. Bundle practice for the prevention of catheter associated UTI.							
9. Bundle practice for the prevention of central line arterial blood stream infection.							
10. Observation of the 5 Rs of medication administration.							
11. Observation of the six international patient safety goals.							
12. Change of shift report using situation, background, assessment and recommendation.							
13. Adequate care and handling of sharps.							
14. Proper care and management of medical waste.							
15. Maintenance of standard precautions to prevent cross infection.							
16. Consistent application of hand hygiene principles.							

Aspects of patient care	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
17. Daily monitoring of environmental risks.							
18. Safe administration of blood and blood products.							
19. Timeous reporting of adverse events.							
20. Following of the time-out process for all invasive and surgical procedures.							
21. Adherence to inter-hospital and inter-departmental transfer processes.							
22. Understanding of your job descriptions.							
23. Participation in induction and orientation programmes.							
24. Participation in ward in-service training programmes.							
25. Knowledge of unit policies and procedures.							

### 3. SUPPORT SERVICES DOMAIN

Indicate your agreement that the following aspects of the support services domain have been adequately assessed by the auditors during the relicensing inspection:

Aspects of support services	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
1. The checking of pharmacy related issues in the unit.							
2. The checking of diagnostic services in the unit.							
3. The checking of health technology services in the unit.							
4. The checking of sterilisation services in the unit.							
5. The checking of mortuary services in the unit.							
6. The checking of efficiency management services in the unit.							
7. The checking of therapeutic and support services in the unit.							

## **SECTION C: EVIDENCE OF BEST PRACTICE**

### **1. PATIENT RIGHTS DOMAIN**

Indicate your agreement that the following patient rights policies, directives or protocols guide your nursing practice:

<b>Aspects of patient rights</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Neutral</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1. Applying the clinical domains of the National Core Standard to improve quality and patient safety.							
2. Observing the Batho Pele Principles during nursing practice.							
3. Acknowledging that patients have rights and responsibilities.							
4. Observing the hospital's mission statement in daily practice.							
5. Being guided by the hospital's quality objectives.							
6. Adhering to the Customer Complaints Policy.							
7. Knowledge of the Basic Life Support Training Policy.							
8. Adhering to the Staff Dress Code Policy							
9. Adhering to the Patient Identification Policy.							
10. Adhering to the Patient Consent Policy.							
11. Taking care of the patients' property and valuables.							
12. Applying the Triage Policy							
13. Implementing the Resuscitation Policy.							
14. Applying the Patient Restraint Policy.							
15. Ensuring that patients receive a discharge summary.							
16. Ensuring that service operating times and visiting hours are observed.							

## **2. PATIENT CARE DOMAIN**

Indicate your agreement that the following patients' care policies, directives or protocols guide your nursing practice:

<b>Aspects of patient care</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Neutral</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1. Using Morse Falls risk assessment for the prevention of falls.							
2. Using Waterloo risk assessment tool for the prevention of pressure sores.							
3. Using IV cannulation bundle practice for the prevention of phlebitis.							
4. Using hang-times for antibiotics. (Antibiotic Stewardship)							
5. Using chlorohexidine prewash before surgery.							
6. Using bundle practice for prevention of SSIs.							
7. Using bundle practice for the prevention of ventilator acquired pneumonia.							
8. Using bundle practice for the prevention of catheter associated UTI.							
9. Using bundle practice for the prevention of central line arterial blood stream infection.							
10. Using the 5 Rs of medication administration in daily practice.							
11. Using the six international patient safety goals in daily practice.							
12. Using change of shift report using situation, background, assessment and recommendation. (SBAR)							
13. Observing the Handling of Sharps and Prevention of Needle Stick Injuries Policy.							
14. Observing the Guidelines for Proper Care and Management of Medical Waste.							
15. Observing the principles of infection control and standard precautions.							
16. Observing the principles of hand hygiene consistently.							

Aspects of patient care	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
17. Reporting daily environmental risks.							
18. Applying the principles of breast-feeding.							
19. Reporting adverse events timeously.							
20. Applying the principles of clinical risk management.							
21. Applying the Sentinel Event Policy requirements when necessary.							
22. Understanding the requirements of the Staff Education Policy.							
23. Using the time-out procedure to identify patients before any invasive or surgical							
24 Using the guidelines of the Blood Transfusion Policy.							
25. Following the inter-hospital and inter-departmental transfer processes.							

### 3. SUPPORT SERVICES DOMAIN

Indicate your agreement that the following support services' policies, directives or protocols guide your nursing practice:

Aspects of support services	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
1. Adhering to the Narcotic Drug Control Policy.							
2. Adhering to the Medication Error Reporting Policy.							
3. Adhering to the Radiation Protection Policy.							
4. Adhering to Blood and Blood Products Administration Policy.							
5. Maintaining critical asset registers for service records.							
6. Using the sterilisation process protocols.							
7. Using policies and procedures to guide all aspects of storage, removal and transportation of bodies to mortuary.							

## SECTION D

## 1. ASSESSMENT OF QUALITY PATIENT CARE

	Not at all good 1	2	3	4	Excellent 5
1. Please rate your unit on the quality of patient care					

## 2. ASSESSMENT OF THE REPORTING CULTURE

	Never	Rarely	Sometimes	Most of the time	Always
1. When a mistake is made, but is discovered and corrected before affecting the patient, how often do you report this?					

### 3. ASSESSMENT OF INCIDENT REPORTING

	No incident reports	1 to 2 incident reports	3 to 5 incident reports	6 to 10 incident reports	11 or more incident reports
1. In the past 12 months, how many incident reports have you filled out and submitted?					

## SECTION E: RECOMMENDATIONS

**You are requested to make recommendations for the Annual Clinical Relicensing Inspections. Please use the box provided below.**

**THANK YOU FOR YOUR PARTICIPATION**



## Appendix 7: Checklist for documentation review

### SECTION A: SERVICE DESCRIPTION DISPLAYED

Service description is visibly displayed in full view of the public and the staff in the form of references, prints and educational materials,	INFORMATION	YES	No
	Patients Right Charter.		
	The National Core Standards.		
	The Batho Pele Principles.		
	The Hospitals Mission Statement.		
	The Hospitals Quality Objectives.		

### SECTION B: THE RELEVANCE OF POLICIES AND PROCEDURES TO THE NATIONAL CORE STANDARDS AND BATHO PELE PRINCIPLES

#### 1. Patient Rights domain

Do these policies and procedures support the <b>Patient Rights</b> domain in accordance with the Batho Pele principles and the Patient Rights Charter to make sure patient rights are respected and upheld including getting access to needed care in an informed and dignified manner?	INFORMATION	YES	NO
	Policy for Customer Complaints.		
	Policy for Basic Life Support Training.		
	Policy for Staff Dress Code.		
	Policy for Patient Identification.		
	Policy for Patient Informed Consent.		
	Policy for Care of Patients' Valuables and Property.		
	Policy for Triage of Patients.		
	Resuscitation Policy.		
	Patient Restraint Policy.		
	Discharge summary for in and out-patients.		
	Visiting Hours Policy.		
	Policy for Emergency Care.		

## 2. Patient Care domain

Do these policies and procedures support the <b>Patient Safety, Clinical Governance and Clinical Care</b> domain and covers how to ensure quality nursing, clinical care and ethical practice, reduce unintended harm to health care users or patients, prevent clinical risk or adverse events, including healthcare-associated infections?	INFORMATION	YES	NO
	Policy for Prevention of Patient Falls.		
	Policy for Prevention of Pressure Sores.		
	Directive for Intravenous (IV) Cannulation.		
	Directive for Hang-times of Antibiotics.		
	Policy for Chlorohexidine Prewash.		
	Directive for Prevention of SSIs.		
	Directive for Prevention of Ventilator Acquired Pneumonia.		
	Directive for Prevention of Catheter Associated Infections.		
	Directive for the Prevention of Central Arterial Line Blood Stream Infections.		
	Policy for Medication Administration with the 5 Rs.		
	Directive for the six International Patient Safety Goals.		
	Directive for Hand over at Change of Shift.		
	Policy for Prevention of Sharps Injury.		
	Policy for Care and Management of Medical Waste.		
	Policy for Infection Prevention and Control.		
	Policy for Hand Hygiene.		
	Policy for Environmental Risk Management.		
	Policy for Breast-Feeding.		
	Policy for Incidence And Adverse Events Reporting.		
	Policy for Management of Clinical Risks.		
	Policy Sentinel Events.		
	Policy for Staff Education.		
	Directive for Time-out Procedures.		
	Policy for Blood Transfusion.		
	Policy for Inter-hospital and Inter-departmental Transfer.		

### 3. Clinical Support Services domain

Do these policies and procedures support the <b>Clinical Support Services</b> domain and covers specific services essential in the provision of clinical care and efficient provision of diagnostic, therapeutic and other clinical support services and necessary medical technology?	INFORMATION	YES	NO
	Policy for the Control of Narcotic Drugs.		
	Policy for Reporting Medication Errors.		
	Policy for Radiation Protection.		
	Policy for Ordering and Administering Blood and Blood Products.		
	Policy for Preventative Maintenance of Critical Assets.		
	Policy for Assessing Sterilisation Of Equipment.		
	Policy for Storage, Removal and Transportation to Mortuary Services.		

### SECTION C: THE COMPETENCE OF NURSING STAFF IS SUPPORTED THROUGH FORMAL PROCESSES

**NB: Shaded areas indicate not applicable**

Procedure	Documents evidenced	Dates recorded	Frequency recorded	Staff signatures present
Relevant unit teaching records.				
Staff educational files.				
Staff induction orientation programmes.				
Hand hygiene certificates.				
BLS certificates.				
Staff job descriptions.				
Staff appraisals.				
Staff CPD training schedules.				
Staff annual practising certificates.				
Acknowledgement of unit policies and procedures.				

## Appendix 8: Letter from the statistician

**Gill Hendry** B.Sc. (Hons), M.Sc. (Wits), PhD (UKZN)  
Mathematical and Statistical Services

Cell: 083 300 9896  
email : hendryfam@telkomsa.net

---

25 April 2016

To whom it may concern

Please be advised that I will be assisting Ms J Chellan (student number 21644757) who is presently studying for a Doctor of Nursing with the statistical aspects of her study.

Yours sincerely

Gill Hendry (Dr)

## Appendix 9: Letter from the professional editor

### **DR RICHARD STEELE**

BA, HDE, MTech(Hom)

**HOMEOPATH**

Registration No. A07309 HM

Practice No. 0807524

**Freelance academic editor**

**Associate member: Professional Editors'**

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Email: rsteele@telkomsa.net

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### **EDITING CERTIFICATE**

**Re: Jamila Chellan**

**Doctoral thesis: AN AUDIT TOOL FOR RELICENSING INSPECTION  
TO ASSESS QUALITY AND PATIENT SAFETY IN ETHEKWINI  
PRIVATE HOSPITALS**

I confirm that I have edited this thesis and the references for clarity, language and layout. I am a freelance editor specialising in proofreading and editing academic documents. I returned the document to the student with track changes so correct implementation of the changes in the text and references is the responsibility of the student. My original tertiary degree which I obtained at the University of Cape Town was a B.A. with English as a major and I went on to complete an H.D.E. (P.G.) Sec. with English as my teaching subject. I obtained a distinction for my M.Tech. dissertation in the Department of Homeopathy at Technikon Natal in 1999 (now the Durban University of Technology). During my 13 years as a part-time lecturer in the Department of Homeopathy at the Durban University of Technology I supervised numerous Master's degree dissertations.

Dr Richard Steele  
28 September 2017  
*electronic*