A QUALITY ASSURANCE INTERVENTION FOR AUDITING OF NURSING RECORDS IN MATERNITY UNITS IN A PRIVATE HEALTHCARE FACILITY

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DECLARATION

I, Lesley Fletcher declare that this Thesis (Ethics Clearance number **M150734**) is my own, unaided work. It is being submitted for the Degree of Master of Science in Nursing at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

_____

(Signature of candidate)

_____Day of _____20_____in_____

DEDICATION

Dedicated first and foremost to the Lord my God and His Holy Mother Mary for the miracles that have happened over the last three years.

Dedicated also to my beloved husband, Malcolm, my beloved children, Peter, Michael and Richard and to my beloved grandchildren, Daniel, Matthew, and Paige.

ABSTRACT

Background

Global recognition has been awarded to the pivotal role played by good nursing records in the continuity and quality of patient care. In spite of this, and also a global phenomenon, studies report that nursing records do not meet expected standards.

Methodology

This mixed methodology study was completed in four phases. Phase 1 was quantitative involving an audit of patient records in two maternity units in a private healthcare organisation. Phases 2, 3 and 4 were qualitative and culminated in the development of a record audit tool designed to measure the quality of nursing care in a maternity unit. The record audit tool was based on information garnered through focus group discussions with nurses practising in the units, opinion by three different expert groups on elements and content to be included in the tool and the clinical utility of the record audit tool.

Results

The audit tool currently in use measures the completion of nursing activities and actions but does not measure quality of care. The audit tool that was developed during this study aimed to address this deficit. Factors other than knowledge and skill influence recordkeeping practices by nurses.

Conclusion

The audit tool that was developed was considered by the experts to be useful in measuring clinical judgment, person-centred care and adherence to the principles of good recordkeeping. Implementation of the tool will further advance the quality of care in the private healthcare facility.

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CHAPTER 1 : OVERVIEW OF THE STUDY

1.1 INTRODUCTION

While medical negligence claims are usually attributable to alleged negligence by health care practitioners, healthcare facilities are often joined in the claims because of alleged negligence by the medical and nursing staff that they employ. Furthermore, claims frequently refer to medical care received a number of years before the claim is lodged and before prescription, which, according to Chapter 1, section 3 (1) of the Prescription Act No 68 of 1969 (SA Government, 1969) is three years unless the completion of prescription is postponed. By that stage, nursing records may be the only "reliable" source of providing evidence of the extent and the quality of the nursing care that was given.

Recordkeeping is an essential part of nursing care (Parkinson and Brooker, S.A. n.d.) and is legislated in the Scope of Practice for Nurses (Regulation 2598, 1984, Chapter 2, Paragraph 2(a)(b)(c)), and the Rules Setting out the Acts or Omissions in Respect of Which the Council May Take Disciplinary Steps (Regulation 387 1985, Chapter 2, Paragraph 5). Good recordkeeping has the potential to protect a nurse's professional reputation and to save millions in legal costs for healthcare organisations. In an article in the Mail and Guardian (April, 2015), *Medical negligence claims threaten NHI*, the Minister of Health, Aaron Motsoaledi is quoted as saying "if we don't do something [about increasing rates of medical negligence claims] the whole system will suffer immeasurable damage."

Organisations frequently settle claims with plaintiffs, rather than defend them against negligence, simply because nursing records do not provide sufficient evidence that nursing care was based on appropriate knowledge and skill and within the parameters of relevant legislation or that it was even given. According to Ohuabunwa *et al*., (2016) "Incompletely filled charts are as detrimental as not filling charts at all and prevent healthcare professionals from doing their jobs effectively".

Over the past 25 years the healthcare facility in which this study was conducted implemented many initiatives to improve recordkeeping by nurses. Interventions included an annual review of patient documentation to promote user friendliness and to prompt

accurate and timeous recordkeeping, on-going workshops, continuing professional development programmes and others. In spite of this, numerous cases referred for litigation resulted in some degree of liability for the hospital group in question because recordkeeping did not reflect the required standards of nursing care (NSO and NursingCenter.com, 2008). According to Gilman *et al.,* (2015), unless a nursing intervention has been recorded, it is regarded as having not been done by many organisations responsible for providing licences and insurance.

Although the majority of births are free of medico legal incidents, the quantum of claims relating to care in the maternity unit is of particular concern. In England alone, Draycott *et al.*, (2015), report that while less than 0.1% of births result in a legal claim, these claims have equated to a cost of £3.1. billion in the past ten years. In South Africa, News 24 City Press (2017) reported that since January 2015, brain-damaged babies made up 76% of claims amounting to R796m for 50 claimants.

The healthcare facility in which this study was done conducts regular patient documentation audits, the purpose of which is to measure the quality of nursing care. The audits are conducted by audit committees in all hospitals using a standardised tool, with guidelines on how the tool should be used. The aim of the guidelines is to ensure a uniform and consistent use of the tool. Inter-hospital peer group audits are also conducted by trained audit committee members who are all nurses.

Both the tool and the guidelines were developed by an internal committee of nurses appointed by the facility. The audit tool has not been externally validated. The tool measures compliance, partial compliance and non-compliance to questions such as "Was a baseline assessment data established on admission", "Were the critical care indicators for care identified?", "Was a reassessment done?" A tick (✓) indicates the degree of compliance. While there may have been compliance to all of these questions, the tool does not measure the quality of the baseline assessment or the reassessment. While there may have been compliance in identifying the critical indicators, there is no measurement of how well they were interpreted or what was done about them. There is also no evidence that critical indicators for care were selected with insight into an

individual patient's diagnosis and healthcare needs. For example, pain is noted as a critical indicator for care on almost all patient care plans regardless of whether or not the patient has pain. Compliance to a simple list of criteria without opportunity to comment, does not provide sufficient information about the quality of care. According to Blair and Smith (2012), this leaves the health care professional and the healthcare institution open to criticism and litigation. Not only should nursing documentation show rational and critical thinking behind clinical decisions; they must also provide written evidence of the patient's progress and appropriate decision making.

Because the audit tool in the facility in which this study was conducted, adopts a "tick list" approach to measuring the quality of nursing, the national target (set by the company) of 85% for compliance to the audit criteria is seldom unmet. The excellent results produced in the audits are in contrast to the actual standards of recordkeeping and in comparison to the number of adverse events / near misses which occur in a hospital and, also, in contrast to what is seen when nursing records are analysed following an adverse event. It is frequently found that records that meet the target do not provide sufficient evidence that safe and competent nursing care was rendered. This indicates that the current audit tool is not fit for purpose.

1.2 PROBLEM STATEMENT

The quality of recordkeeping by nurses in the private healthcare group is frequently below standard. Although all nurse training programmes include recordkeeping as a pivotal component of good nursing care, the transition from training to practice does not reflect this emphasis. In the facility in which this study took place, monthly audits using a standardised audit tool are conducted. Good results are always obtained (a score of more than 85%) which seems to indicate that good standards of nursing care are being rendered. However, when patient records are studied for medico legal purposes, the same records that obtained a good audit result, are frequently lacking when proof of appropriate nursing care or even evidence of any nursing intervention is being sought.

Because of the questionable validity of the audit tool, the degree of compliance to recordkeeping standards is uncertain. It is therefore necessary to design an audit tool

which will provide a more accurate indication of the quality of care provided which will, in turn, alert managers and quality personnel to areas of strengths and weaknesses so that remedial action can be taken, the quality of patient care improved and litigation avoided.

1.3 PURPOSE OF THE STUDY

To develop a record audit tool for monitoring and improving the quality of care rendered to patients in the maternity unit at a private health care facility.

1.4 RESEARCH QUESTION

How can the patient documentation audit tool be refined to reflect the actual standard of nursing care in order to monitor and improve the quality of care rendered to patients in the maternity unit at a private health care facility?

1.5 OBJECTIVES

i. To determine the validity of the patient audits done according to the existing audit tool.
ii. To explore why nurses do not comply adequately with the requirements for recordkeeping.
iii. To obtain opinion from an expert group of nurses to decide on what should be assessed to ensure that quality nursing care is provided in a maternity unit.
iv. To develop a record audit tool which will accurately reflect the standard of care.

1.6 OPERATIONAL DEFINITIONS

For the purposes of this study, the following definitions apply:

Audit refers to a practical exercise in which a prescribed audit tool is used to measure compliance to a number of audit criteria.

Audit Committee refers to a select group of nurses in a hospital in a private healthcare group who come together on a regular basis to audit patient records.

Audit criteria refer to elements of nursing care considered by the audit committee to be indicative of the quality of nursing care rendered.

Concurrent audit refers to a process whereby patient records are audited by a select group of nurses in a ward while the patient is in the ward receiving nursing care.

Nurse refers to a person who is registered or enrolled with the South African Nursing Council in terms of the Nursing Act 2005 (Act 33 of 2005).

Midwife refers to a person who is registered as a midwife with the South African Nursing Council in terms of the Nursing Act 2005 (Act 33 of 2005).

Patient Documentation Audit refers to an audit method used by the private healthcare group to evaluate the quality of nursing care by studying records made by nurses in documents used for patients.

Patient Documentation Audit Tool refers to the tool used by the private healthcare group to audit the quality of nursing care.

Patient records refer to the documents used by the nurses to record nursing care provided during the patient's admission to the hospital.

Retrospective audit refers to an audit of patient records by the Audit Committee after a patient has been discharged from the hospital.

1.7 CONCLUSION

In this chapter, a background to the research study has been provided as well as an outline of the study. The following chapter comprises a literature review related to the study.

CHAPTER 2 : LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 2 will provide a comprehensive overview of literature describing the importance of nursing documentation and exploring the barriers preventing nurses from adhering to standards of record-keeping. Studies have shown that although importance of good record-keeping is widely acknowledged for reasons discussed in this chapter, poor record keeping by nurses appears to be a global phenomenon prompting ongoing research into the constraints and barriers which prevent them from adhering to best practice standards of record-keeping (Okaisu *et al*., 2014).

2.1 HEALTH RECORDS AND NURSING DOCUMENTATION

The terms “nursing documentation” and “record-keeping” are frequently used interchangeably. Geyer (2005), defines record keeping as “… any permanent form of information about a healthcare user”. Lawrenson (2018), states that “Health records record a patient’s medical health, medical problems, diagnoses, and the treatment therefore, either in or out of hospital, and sometimes over an extended period of time”. Her definition is confined to records provided by medical practitioners while the definition by the Health Professions Council of South Africa (HPCSA) Guidelines (2008), makes reference to a record which contains information recorded by a “healthcare professional”. The South African Nursing Council (SANC) does not define a health record. For the purposes of this study, the concepts nursing documentation and record-keeping will refer to notes made by nurses in documents used to record patient care and progress.

2.2 THE IMPORTANCE OF RECORDKEEPING

2.2.1 A Professional Imperative

The value of meaningful and insightful nursing records as a means of effective communication between nurses caring for the patient is undisputed (Johnson *et al*., 2015; Beach & Oates 2014). Good records promote quality patient care by providing continuous information on the patient’s condition and responses to interventions. In contrast, the

same authors cite research evidence indicating that poor record-keeping practices result in prolonged hospital admission and deterioration of health. While records have long been recognised as being a communication tool for nurses, the greater significance of nursing documentation as a means of communication between all role players in the multi-disciplinary team has also become evident (Jefferies, *et al*., 2010). Today, research leaves little doubt about the strong link between the quality of patient care and the quality of nursing documentation (Mykkanen *et al*., 2012; Okaisu *et al*., 2012).

Prideaux (2011), and Rodden and Bell (2002), cited in Prideaux, acknowledge the vital role of nursing documentation in the provision of quality patient care when they maintain that nursing records cannot be separated from clinical care but form an integral part of such care. In their studies, Griffith (2015) and Pirie (2011) argue that while records do have an administrative purpose (also acknowledged by bodies such as the Nursing and Midwifery Council (2009)), and the Health Professions Council of South Africa in their HPCSA Guidelines for the Keeping of Patient Records, Booklet 14 (2008), their primary function is to promote safe patient care through continuity and consistency and "they are not an optional extra to be fitted in if circumstances allow". Scruth (2014), refers to records as being central to a nurse's activity and one which is intricately entwined with the nurse's independent and professional role.

As early as 1859, in her book, "Notes on Nursing", Florence Nightingale, known as a British nurse, statistician and social reformer (Selander, 2018; Chelagat, *et al*., 2013), considered the importance of recordkeeping as a professional imperative. Nursing notes were regarded as important for communicating doctors' instructions, but records also provided information that allowed statistical analysis. Authors Aravind and Chung (2011) and Magnello (2010), maintain that the beginnings of evidence based practice can be traced to Nightingale who, when arriving in the Crimea in 1853, was reportedly appalled by the haphazard management of records, including their storage and the record keeping practices by healthcare personnel that were treating injured and sick soldiers in hospitals during the Crimean War. It seems that no value was placed on post de factor information contained in the records. She set about changing the situation and in her book, "Notes

on matters affecting health, efficiency and hospital administration of the British Army:1858", she used the information that she recorded to show that although many of the injuries and much of the mortality were war related, a significant number of military deaths could be attributed to the terrible conditions in hospitals. Nightingale is credited with the invention of the *Coxcomb Chart* by means of which she attempted to demonstrate the number of avoidable deaths during the war. Evidence produced in her records and by her statistics was later used to bring about major reforms in the British healthcare system (Chelegat *et al*., 2013). The vital role of records in research is emphasised by Gregory and Rodovinskty (2010), when they argue that nursing documentation is important not only for quality patient care but also as an important source of evidence for purposes of research and review of healthcare practices at a micro level and influential in planning healthcare systems at a macro level.

2.2.2 A Legal Imperative

The legal imperative for keeping quality health records is enshrined in legislation in many countries including the Republic of South Africa. Legislation directs nurses to document patient care and documentation should reflect the application of relevant legislation and regulations (Griffith, 2015; Beach and Oates, 2014; Scruth, 2014). The authors maintain that nursing records and documents will play a pivotal role in answering questions in the event of investigations and reviews. Legislation not only directs the content and the manner in which records are written but also other dimensions of record keeping. Patient autonomy, collaboration in decision-making, consent to treatment should be implicit in nursing documentation. Factors such as confidentiality, access to records, storage of records are all governed by legislation (National Health Act, South Africa, 2003 – Act 61 of 2003).

In the years preceding 1970, when litigation against healthcare practitioners was uncommon, little attention was given to the storage of records which were often destroyed on the discharge or demise of a patient (Chelagat *et al*., 2013). Emerging legislation has changed that. In South Africa today, the National Health Act (South Africa 2003:s 6), obliges healthcare care providers to protect health records. Patients or relatives seldom requested their healthcare records from hospitals and if they did, they were often refused. The Constitution of the Republic of South Africa, Act 108 of 1996, Section 32 makes

provision for healthcare consumers to access their health records. Section 53 (1) of the Promotion of Access to Information Act, 2000 (Act No. 2 of 2000) (Regulation 10) and Section 18 (1) (Regulation 6) have prescribed forms (Form C and A respectively) which must be completed for access to records from private and public bodies respectively. Before promulgation of the Act, patients could only inspect their medical records after the commencement of legal proceedings (Lawrenson, 2018). Section 30 of the same Act serves to protect the patient's right to privacy and confidentiality.

Legislation specifically related to nursing records is found in Regulations Relating The Scope of Practice of Nurses Who Are Registered or Enrolled Under the Nursing Act No. 50 of 1978, Regulation R2598, 1984, Chapter 2, Section 2, subsections (a), (b), (c) which require a registered nurse to diagnose a health need, provide and execute a plan to meet the health need and report on the patient's response to intervention. Evidence of application of this legislation will only be seen in written or electronic records compiled by nurses.

Regulation R387, 1985, Paragraph 5 makes provision for disciplining a registered nurse who fails to keep clear and accurate records whether through wilful or negligent omission. Laws such as the Consumer Protection Act, South Africa, Act 68 of 2008, Part H, make provision for healthcare consumers to demand quality service, opening the way for litigation should there be a perception of poor quality service or negligence. Nursing documentation is an important source of evidence of medical and nursing care provided by an individual or group of individuals. In a special feature article written by Howarth and Gillespie (2012), for medical practitioners but equally pertinent to nurses, they stated "…….. to underestimate or disregard altogether the importance of keeping good medical records is to potentially deal a severely damaging blow to your career. Whether you have received a complaint or a claim for clinical negligence, or you are at an inquest, the presence of a complete, up-to-date and accurate medical record can make all the difference to the outcome".

According to Urquhart and Grant (2010), who refer to nurses as the "key collectors, generators and users" of patient records, most information about patients when they are in hospital, is contained in nursing documentation. This places a major responsibility in the hands of nurses for the provision of comprehensive, accurate and careful documentation not only to ensure the provision of skilled and safe care but to safeguard his or her own professional integrity and to protect the reputation of the healthcare care facility in which s/he is employed; a view echoed by Scruth (2014) and Nikki *et al*., (2010) when they reiterate the significance of nursing notes as being an exchange and transfer of information between members of the multi-disciplinary team. Griffith (2016) and Pirie (2011), agree that good recordkeeping plays a vital role in protecting a nurse's legal rights.

Other dimensions of health records legislated by the National Health Act 61 of 2003 include requirements for obtaining consent from the user for treatment and the user's participation in decision making (Sections 6 – 9), Section 10 which refers to the obligation of the healthcare provider to provide the patient with a discharge report and Section 13 relating to the obligation to keep health records by the healthcare provider. Different sections in the Act deal with disclosure of information, access to information with the user's authorisation, and storage of health records. (Lawrenson, 2018, unpublished).
Confidentiality of patient records is addressed in various pieces of legislation including the Protection of Personal Information Act, South Africa, Act No 4, 2013, as well as in the Patient's Rights Charter.

2.3 POOR RECORDKEEPING – A GLOBAL PHENOMENON

Although the importance of good recordkeeping by nurses is widely acknowledged and undisputed, and in spite of ongoing efforts to emphasise the importance of quality documentation by nurses, it is still reported as being poor and unsatisfactory, a finding reflected by Okaisu *et al*., (2014), when they wrote "In spite of numerous efforts globally, inadequate documentation continues to be reported …." . This view is reflected in other studies. Sharma (2014), in a study conducted in a psychiatric hospital in the Punjab came to the conclusion that various documents such as the treatment sheets and bedside charts did not meet required standards of recordkeeping while a study done in Iran by

Vafaei *et al*., (2018) found that documentation in an emergency unit was below expected standards. Dehghan *et al*., (2013) express the view that despite the implementation of many quality improvement programmes acceptable standards of clinical documentation by health professionals remains problematic.

In reviewing the literature for her article which questions adequate recordkeeping by Emergency Nurse Practitioners, Neary (2014), concluded that most of the studies confirmed that problems existed with standards of nursing documentation and not just as isolated phenomena but within the international nursing community. In his writings, Prideaux (2011), accedes that nursing documentation consistently fails to meet good record-keeping standards and acknowledges that studies have shown poor recordkeeping to be world-wide.

2.4 CONSTRAINTS TO KEEPING GOOD NURSING RECORDS

Prideaux (2011) cites a number of studies providing reasons for poor recordkeeping and concludes that the major constraint to keeping good records and in fact any record at all was found to be time, due to shortage of personnel. This is not the only constraint and others that have been identified cannot be ignored in attempts to improve recordkeeping in healthcare facilities. In an action research project conducted by Okaisu *et al*., (2014), they reported on related studies that found factors such as nurses' attitudes, the time that record-keeping takes nurses away from caring for their patients and heavy workloads as impacting on the quality of records and how nurses report. Similar findings were reported by Vafaei *et al*., (2018) when they referred to job stress as being a factor. Documentation systems can generate negative attitudes if they are cumbersome or if they are fragmented or require duplication from one record to another.

An emerging trend amongst some nurses is the reluctance to document nursing care because of the ever increasing threat of litigation (Brown 2013; Cartwright-Vanzant 2010) cited in Okaisu *et al*., (2014). A punitive culture in a healthcare setting can result in documentation without insight simply to avoid sanction.

Inadequate training on nursing documentation has been found in some studies. In a study by Vafaei *et al*., (2018), nurses in an emergency unit reported that they had not received

training but had learned by trial and error and by copying nurses who they perceived as being competent.

2.5 BEST PRACTICE IN RECORD-KEEPING

While there are no statutory or definitive guidelines for record keeping by nurses, HPCSA (2008), has published guidelines for its members on the keeping of patient records. In their rationale for retaining records, they cite factors such as the importance of records in providing material for research and teaching, the evidence records provide in matters that are brought to litigation and their ability to provide information for making further diagnoses and ongoing clinical management. In similar vein, in considering nursing records, Beach and Oates (2014), opine that records serve not only as evidence of the care received by the patient but also facilitate decision-making on future care and promote continuity of care.

Health records, including nursing documentation must provide objective evidence and information pertaining to a particular event at the time of the incident and the judgement and interventions of the multi disciplinary team at the time of the event (Lawrenson, 2018).Geyer (2005), argues that nurses, acting in their roles as patient advocates, are ethically bound to create good records, to maintain confidentiality and to ensure the safekeeping of records. Quality documentation should reflect application of knowledge, skills, clinical judgement, collaboration with the patient in decision-making and communication with the multi disciplinary team (College of Registered Nurses of Nova Scotia, 2012).

Because of their important role in communication among members of the entire healthcare team, nursing records must be clear, accurate and comprehensive. There must be a narrative with clear timelines of what happened to the patient, the patient's response to medical and nursing interventions, the patient's own participation in treatment. Records must be continuous, reflecting the integration of care by nurses handing over the patients to their colleagues (Nikki & Campos, 2010).

Information must be of a high quality (Saranto, & Kinnunen: 2009; Geyer:2005) and must be relevant and meaningful; insightful and justifiable.

Nurses must avoid making entries into patient records simply because they are required by the healthcare facility's auditing standards. Notes for the sake of notes should be avoided as they can become habitual practice producing a false sense of security for the nurse who thinks s/he may have completed a report (Jeffries *et al*., 2010).

Professional and appropriate terminology is vital to avoid confusion and to reassure the reader of the nurse's educated assessment of the circumstances surrounding patient care, patient response to the care and information provided to other members of the multidisciplinary team when necessary. There should be no room for variation in interpreting the notes written in the patient record. Nikki *et al.,* (2010) maintain that poor communication and understanding between members of the healthcare team is an important factor in cases that are brought to litigation.

2.6 PRINCIPLES OF GOOD RECORD KEEPING

While most authors refer to the ability of good records to promote continuity of care, citing them as being "inextricably linked to the patient's right to receive quality care" (Mykkanen *et al*., 2012; Prideaux, 2011), the question of what constitutes a good record must be addressed. There appears to be consensus among authors on the essential principles of good record-keeping discussed in this paragraph (Griffith, 2016; Beach and Oates, 2014; NMC, 2009; Dimond, 2005; Geyer 2005;).

Legibility of handwriting, identifiable signatures, contemporaneity and chronological recording are all components of good record-keeping and are essential for providing a clear and concise report of the patient's journey. The person writing the record must be identifiable for the clarification of events recorded in the narrative or in circumstances in which litigation is considered.

Professional judgement must be used to decide on the relevance of recorded information which must be factual, should avoid the use of abbreviations that are not universally acceptable and be jargon free (Griffith, 2015; Scruth, 2014).

Importantly, records must be comprehensive, including details of assessments, planning based on patient diagnosis (nursing and medical) and resolution and / or re-evaluation of needs and problems. While the completeness of a record is important, the reporter must be cautious to keep the record brief and relevant (Scruth, 2014). In their study, Jeffries *et al*., (2010) found that nurses were not using their records effectively and that because of the pressures of workload, they had become "little more than an accounting mechanism." Untoward and unexpected events must be recorded together with all relevant data. Scruth (2014), maintains that healthcare professionals must understand the principles of legality when writing records as well as the consequences for not fully acknowledging the legal status of a nursing record.

Collaboration by the multi-disciplinary team, and collaboration with the patient in decision making must be reflected in records. Dehghan, *et al*., (2013), express the view that patients must be able to use their records for their own information.

Notes must be unambiguous leaving no room for differing interpretations. Professional language should be used. In South Africa, a country with 11 official languages, this is even more important when terms familiar to individuals of one language-speaking group may be understood differently by nurses from another language speaking group. For example, the term "lying in" may be understood by a nurse whose mother tongue is English to mean the period after delivery of a baby while for the nurse whose fluency lies within one of the other ten official languages it may be understood to mean that the patient is simply lying in her bed. The professional term, "puerperium" would probably have the same meaning to all nurses.

Alterations in records must be clearly marked as such and signatures of those by whom alterations were made must be attached. This is important to erase suspicion of

falsification of records in any circumstance but especially important in the aftermath of an adverse event. Falsified records constitute professional misconduct for which the writer can be sanctioned.

Records must reflect relevant legislation for example, patient collaboration in treatment and decision-making. Records must be legible when photocopied or scanned and pages must be numbered to avoid difficulty in sorting out chronological order. Destruction of records must be authorised by a suitably delegated person and must be done in alignment with relevant policy and legislation.

2.7 ENTRIES IN NURSING RECORDS

Although a reference could not be found in the literature, in the practice setting in South Africa, the question of who is entitled to write in the nursing documentation is frequently asked. This question is most likely related to the fact that currently there are three categories of nurses on the SANC registers and rolls, namely, registered nurses, enrolled nurses and enrolled nursing auxiliaries. If Geyer's definition (2005) and more recently, Lawrenson's definition (2018) of a health record is accepted, it is reasonable to assume that any record containing information pertinent to the health of a user must be considered as a health care record. Documents such as vital signs charts, fluid balance charts, Glasgow Coma Scale charts and many others are therefore considered to be health records. This implies that nurses of all categories are responsible for maintaining accurate and complete health care records. However, the question often extends in particular to patient progress notes which were traditionally the domain of the registered nurse. Faced with nursing shortages and increasing workloads, it has become common practice for all categories of nurses to record entries in the patient records including the patient's progress records. The bigger question relates to the extent and the importance that records feature in learning programmes for enrolled nurses and enrolled nursing auxiliaries as well as to the supervision of their recordkeeping by registered nurses. Literature abounds with studies that are highly critical of notes made by professional nurses – to what extent would the quality of records by more junior categories of nurses

be influenced? The answer to this question goes beyond the scope of this study but may form the basis of future research.

2.8 AUDITING NURSING RECORDS

Poor record keeping by nurses often comes to light as a secondary finding when adverse events are under investigation in healthcare institutions (Nikki *et al.,* 2010). Structured audit processes should be in place to address record-keeping issues on a regular and continuous basis.

A nursing documentation audit must be seen as an improvement initiative to promote quality assurance (Poortaghi *et al*., 2015; Mykkanen *et al*., 2012;). The purpose of an audit should be to evaluate care and in so doing, improve quality through increasing awareness and knowledge as well as the skills and attitudes required to keep good records (Poortaghi *et al*., 2015; Scruth 2014; Arries, 2006). In their book, Van den Bergh *et al*., (2014) explain the difference between quality assurance and quality improvement as the first one being reactive and the second being proactive. In the first instance, past performance is measured against a set of standards, while in the second instance, interventions are initiated to promote good performance even before measurement is effected. In the researcher's view, a nursing documentation audit can serve both as quality assurance and quality improvement initiatives if conducted in a non-punitive fashion. Bjorvell, *et al*., (2000), point out that an audit is a critical analysis of the quality of nursing care, implying that it is not only done to verify quality but to identify factors that detract from quality, that is, a quality assurance exercise. The findings however, can be translated to a quality improvement initiative if nurses accept accountability for addressing negative findings and implementing measures to effect changes towards improving quality. By the nature of its purpose, a nursing documentation audit tool must serve as both a quality improvement and a quality assurance instrument.

2.9 DEVELOPMENT OF AN AUDIT TOOL

The design of nursing documentation usually reflects the nursing theory or combination of theories adopted by a healthcare provider to structure nursing care (Scruth, 2014). For example, it can be based on activities of daily living or the nursing process or both.

The development of an audit document and the indicators for quality, will align to a large extent on the same conceptual framework (Arries, 2006) but should guard against becoming restricted and inward-looking by confining its ability to measure quality against a narrow set of criteria. Criteria used to measure quality care must be relevant and feasible (Poortaghi *et al*., 2015).

2.10 CONCLUSION

An abundance of literature has highlighted an on-going recognition of poor practice with regard to nursing documentation in spite of nurses' acknowledgement of its importance.

In the healthcare facilities in which this study was conducted, efforts to address poor record keeping practices have spanned at least 25 years and while improvements have been noted, there are many shortcomings. This study will address the possibility of approaching the problem using an audit tool to improve the quality of record keeping by highlighting areas on which continuous training in recordkeeping must focus.

CHAPTER 3 : RESEARCH METHODOLOGY

3.1 INTRODUCTION

The purpose of the study was to develop a record audit tool for monitoring and improving the quality of care rendered to patients in the maternity unit at a private health care facility. It was important to understand the problems relating to the use of the current audit tool, to explore the reasons for nurses not complying adequately with the requirements for recordkeeping, as measured by the current tool, to obtain opinion from an expert group of nurses to decide on what should be assessed to ensure that quality nursing care is provided in a maternity unit and then to develop a record audit tool to measure the quality of nursing care. The final step in the process of development of the record audit tool will be its presentation to a group of theoretical experts for comment on its clinical utility.

This chapter will present a detailed description of the research design and methods used to reach the objectives of the study and will include a description of the research setting, data collection and data analysis.

3.2 RESEARCH DESIGN

This study used a phased, mixed-method sequential approach using quantitative methods to conduct a record audit followed by qualitative methods to develop the audit tool. The phases of the study are summarised in table 3.1 below:

Table 3.1 Summary of research methods

Phase	Objective	Approach	Method
1	To determine the validity of the patient audits done according to the existing audit tool.	Quantitative	Record audit
2	To explore why nurses do not comply adequately with the requirements for recordkeeping.	Qualitative	Focus groups
3	To obtain opinion from an expert group of nurses to decide on what should be assessed to ensure that quality nursing care is provided in a maternity unit.	Qualitative	Nominal group
4	To develop a record audit tool which will accurately reflect the standard of care.	Qualitative	Delphi technique Expert review

The objectives lent themselves to a mixed methods design and it was important to gather data sequentially as the researcher sought to understand from the participants themselves, the problems being experienced in relation to record keeping and measures that they thought may provide solutions. The knowledge and experience of the experts was then used to translate these ideas into professionally and legally acceptable practice. According to Grove, et al., (2013), qualitative data assists the researcher to understand from the participants what their needs are, and what they feel are the appropriate interventions.

Berman (2017) states that there is no universal definition of mixed methods research, but Creswell and Plano Clark (2011), define its core characteristics as being a single research study, using both qualitative and quantitative strands of data which are collected and analysed separately, and then integrated – either concurrently or sequentially – to address the research question. In this study the results were integrated sequentially. The quantitative component of the study was smaller than the qualitative components making it a quan – QUAL study according to Creswell's classification.

3.3 RESEARCH SETTING

The study was conducted in a large private hospital group in South Africa, that has over 6000 beds country-wide.

The study was confined to the maternity services of the hospital group and, specifically within two purposively selected private hospitals. Their selection was based on size and location. These units are the two largest maternity units in Gauteng Province in the private hospital group in which the study was undertaken. Their average occupancies are reflected in table 3.2. below:

Table 3.2: Average occupancies of maternity beds between January and July 2015

Hospital	Total No of Beds	No of Maternity Beds	Average Occupancy of Maternity Beds – January – July 2015
Number A	220	30	57%
Number B	322	20	54.8%

The maternity units admit fee-paying patients for their confinements. The units do not provide routine antenatal care – this is provided by the patient's own obstetrician. Patients with complications during the antenatal period are admitted for observation and treatment. Since many of the obstetricians have consulting rooms on the hospitals' premises, pregnant women are frequently referred to the units for cardiotocographs (CTGs) at the same time of their visits to their obstetricians. These visits are not considered to be admissions unless the CTG indicates reasons for concern after which the patient may be admitted for observations.

While both hospitals have well-baby nurseries, they are used only for the first hour or two after the birth of the baby after which babies are placed in the care of their mothers under the supervision of the nursing staff.

The maternity units in both hospitals are supported by Neonatal Intensive Care Units in case the need for such care arises.

The units are staffed by registered midwives, registered and enrolled nurses and enrolled nursing auxiliaries.

3.4 POPULATION AND SAMPLE

The population and sample for each of the phases of the study will be described individually.

3.4.1 Phase 1 – Record audit

Ante natal, intrapartum and postpartum nursing records of all patients admitted to the maternity wards in the two purposively selected hospitals in February 2016. Seventy eight (78) patients were admitted to Hospital A and eighty (80) to Hospital B – (n=158), which constituted the population for this phase of the study.

The intention had been to re-audit the total sample of the files that were audited by the internal auditing committee for comparison purposes, but Hospital B had only audited 7 files, whereas Hospital A had audited 25. The researcher therefore re-audited the 25 files of Hospital A, but drew a total of 27 files from Hospital A and 30 from Hospital B and

audited them de novo to establish the quality of the auditing and to determine problem areas that may require attention when developing a new audit tool.

The sample for the comparison of files was therefore 25 (n=25) and the sample for the de novo audits was 57 (n=57).

The realised sample was (n= 82) which provided a 7% margin of error and a 95% confidence level (Raosoft Sample Size Calculator).

3.4.2 Focus groups

The population comprised all registered midwives, registered nurses, enrolled nurses and enrolled nursing auxiliaries practising in maternity units in the two purposively selected acute care hospitals in a private hospital group – N = 30.

The sample was a convenience sample which consisted of nurses who were either going off their night shifts or coming to work on the day shift in the two purposively selected maternity units on the morning chosen for data collection, that is, 22nd and 29th July 2016 respectively. The invitation to participate did not discriminate between categories of nurses (registered midwife, registered nurse, enrolled nurse, enrolled nursing auxiliary) but included all nurses who were available and willing to join the discussion. The number of nurses who participated in each of the two purposively selected hospitals is shown below in tables 3.3 and 3.4 respectively:

Table 3.3: Numbers and categories of nurses in Hospital A

Registered Midwife	Registered Nurse	Enrolled Nurse	Enrolled Auxiliary Nurse
6	0	1	0

Table 3.4: Numbers and categories of nurses in Hospital B

Registered Midwife	Registered Nurse	Enrolled Nurse	Enrolled Auxiliary Nurse
4	0	0	2

3.4.3 The nominal group

In order to be considered an expert for the purposes of this phase of the research, participants had to be registered nurses and midwives each of whom is considered an expert in one or more of the following fields – nursing education, nursing practice, nursing ethics and legal matters. They were required to hold at least a Master's degree in nursing and have a minimum of ten years' experience in their field of speciality. Invitations were accepted by six of the eight nurses invited. Table 3.5 reflects the fields of expertise that were represented.

Table 3.5: Fields of expertise of experts for nominal group

Expertise	No of participants
Nursing ethics and legal matters	2
Nursing Education	2
Nursing Practice	2

3.4.4 The Delphi study

The population for the Delphi study were registered nurses and midwives each of whom is considered an expert in one or more of the following fields – nursing education, nursing practice, nursing ethics and legal matters. They were required to be active in the nursing profession and hold at least a Master's degree in nursing. The sample was also a convenience sample selected to ensure that there was a balance of experts from the hospital group and outside the hospital group. A total of 15 nurses participated in the Delphi study. Table 3.6 reflects the expertise of the members of the Delphi Group.

Table 3.6: Expertise of members of the Delphi Group

Expertise	Inside Group	Outside Group	Number
Nursing Education	4	2	6
Nursing Practice	6	1	7
Ethics	-	1	1
Legal	1	-	1

3.4.5 Focus group with theoretical experts

The population for the focus group with theoretical experts consisted of registered midwives currently practising in maternity units or in the field of nursing education and who were considered experts in the clinical field of midwifery by virtue of their experience. The sample was purposively selected based on the participants' membership in a group of clinical experts in the facility in which the study was undertaken. A total of five (5) midwives participated in the discussion.

3.5 DATA COLLECTION

3.5.1 Phase 1 – The record audit

The purpose of the audits was to determine the validity of the patient audits done according to the existing audit tool. The term 'validity' for the purposes of this study was taken to mean "the quality of being logically or factually sound; soundness or cogency" (Oxford Living Dictionary, 2018).

For this purpose, the researcher needed to establish whether the scores given were appropriate and whether the various auditors scored in a similar manner, in other words, whether the scores were reliable, or were logically and factually sound. This was necessary as although the audits are carried out by a team, the composition of the teams vary from audit to audit. For this reason, the researcher re-audited all the files personally so that there was consistency of scoring before comparing her scores with those of the original audit. The term 'cogency' refers to whether a statement is clearly expressed and persuades people to believe it. The researcher made field notes as she re-audited the patient records to record her findings relating to cogency which were checked by a second auditor.

Arrangements were made with the Patient Services Managers from the two hospitals to delay the despatch of the files to the scanning company until all of them had been audited by the researcher. The researcher visited each of the hospitals once a week to audit the files of all admissions to the maternity wards between 1st February and 28th February 2016. A printout of patient admissions to the units served as a control sheet to ensure that none of the files was missed. A total of 78 patients were discharged from Hospital A

and 80 from Hospital B during this period which meant that, according to policy, 16 files should have been audited between the two hospitals. Hospital A had, however audited 25 and Hospital B only 7. Only Hospital A's files were therefore used for comparative purposes, that is, the researcher re-audited them. As insufficient files were available from Hospital B, she drew another sample of 57 randomly selected files for auditing (27 from Hospital A and 30 from Hospital B). The data from these files was entered onto an Excel spreadsheet as well as the company's in-house data capture system which will be referred to in this study as the *Data Capture System*.

Table 3.7: Number of files audited at each hospital

Hospital A	Hospital B	Total
27 patient files	30 patient files	57

A sample of the data collection tool – *Patient Documentation Audit Form* – is attached as Annexure 1.

The researcher took notes while engaged in the auditing which constituted field notes for the purpose of informing the third phase of the study which was to develop an improved audit tool.

The *Patient Documentation Audit Form* allows for assessment of a number of elements believed to be indicators of quality nursing care. Each of the elements measured is awarded a score indicating compliance, partial compliance or non-compliance. The tool also allows for the recording of a "not applicable" which is taken into consideration in the formula for calculation of the total score. A number of the parameters are deemed as critical indicators for quality nursing care and the *Data Capture System* does not allow them to be marked as "not applicable".

Table 3.8: *Data Capture Scoring System* for Patient Documentation Audit Form

Description	Score
Compliant (critical Indicator)	4
Partially compliant (non critical indicator)	2
Partially compliant	1
Non-compliant	0

Manual calculations are not required; The *Data Capture System* with its built in formulae calculates the total score and percentage.

Compliant column – The red block in this column means it is a CRITICAL FACTOR and the score = 4.

Critical factor indicator - 

If a section is scored as a critical factor, the "not applicable" block is greyed out and cannot be selected.

Information button -  Each element has an information button and is linked to an explanation of the meaning of the element.

Figure 3.1: Excerpt from *Data Capture System* Guideline on the capturing of information on the *Data Capture System*.

3.5.2 Phase 2 – The focus groups

Arrangements were made with the unit managers of the two purposively selected maternity wards to hold focus groups with the nursing staff at 07h30 on the mornings of 22nd July 2016 and 29th July 2016 respectively. The objective for this phase of the study was to explore why nurses do not comply adequately with the requirements for record keeping with a view to contributing towards the final objective for this study which was to develop or refine, and test, a record audit tool which will accurately reflect the standard of care.

Discussions were held at 07h30 to include both day and night staff. The invitation to participate in the group discussion did not discriminate between categories of nurses (registered midwife, registered nurse, enrolled nurse, enrolled auxiliary nurse) – whoever was available and willing to participate formed part of the group.

According to Polit and Beck (2008), this type of interview is suitable when the researcher is not sure of what he/she does not know. Participants described their experiences which according to Grove et al., (2013:66) is a feature of qualitative research.

Participants who had agreed to participate were all given a copy of the information sheet (see Annexure 2) and a copy of the two consent forms, namely, the one to participate in

the research study (Annexure 3) and the consent form for the focus group to be recorded and transcribed (see Annexure 4).

Two questions were asked as per the focus group guide (Annexure 5) as follows:

1. Why do you think nurses have difficulty, generally, in complying with requirements for good recordkeeping?

Probes: Could you tell me a bit more?

Why do you think this is the case?

Does this often happen?

2. Why do you think nurses have difficulty in complying with these aspects of good recordkeeping?

Probe: Could you tell me more about the areas where this is a problem?

The group discussion was spontaneous and informal. Participants were encouraged to converse freely and to interact with each other and the interviewer. The interviewer ensured that all members were able to contribute to the discussion.

Once both groups were complete, the recordings of the interviews were transcribed verbatim and prepared for analysis (See Annexure 6 for an example of a transcribed section of one of the focus groups).

3.5.3 Phase 3 – The nominal group

A nominal group technique was used to obtain opinion from a group of six nurses who were considered experts in their fields of practice. The group was led by the researcher supported by the researcher's study supervisor.

The guidelines for conducting a nominal group developed by the Centre for Disease Control (CDC, 2006), were used to guide the process. These guidelines begin with preparing the meeting room and provision of supplies. The venue used for the group comfortably accommodated the members of the group. Facilities were available for a slide presentation and a flip chart was used for noting comments from the participants. Each participant was provided with a pen and a pad of "sticky notes". The sticky note for each

participant was in a different colour in order to easily differentiate between members of the group.

The guidelines then refer to 'the making of an opening statement'. The researcher welcomed the members of the group, introduced the members of the group to one another and clarified their respective roles and the objectives of the group. The researcher gave background to the study to emphasise the importance of the study to nursing and the nursing profession, and also referred to the importance of each individual member's contribution as well as an indication of the process to be followed to meet the objective of the group. Members were given the information sheet (Annexures 7 – 9) and consent forms (Annexure 10) and asked to sign the consent forms before commencing with the group discussion. Members were assured that codes would be used to identify them in the research report to ensure that none of them could be personally identified although they would clearly know one another's contributions. Members were, however, asked to keep the discussions confidential.

The four steps of the nominal group listed by the CDC (2006) are:

Step 1 – Generating ideas

Step 2 – Recording ideas

Step 3 – Discussing ideas

Step 4 – Voting on ideas

3.5.3.1 Generating ideas

The researcher gave a short presentation on the background of the study and findings from phase 1 and 2 of the study (the record audit and the focus group interviews). After this, the process was initiated with the question "What should be assessed to ensure that quality nursing care is provided in a maternity unit"?

Members of the group were asked to write ideas in brief phrases or statements on the sticky notes provided, and to work silently and independently.

3.5.3.2 Recording ideas

Members of the group posted their respective sticky notes on the space provided, initially without any debate, so that the entire group could see all the ideas. By a process of consensus, any duplicates were eliminated and the remaining ideas captured on a flip chart.

3.5.3.3 Discussing the ideas

Each recorded idea was then discussed to determine clarity and importance. The researcher solicited comments from the members asking if they had questions or comments about each item. The reasoning behind their opinions was carefully solicited as was their feeling about the relative importance of the item. During this process some members withdrew items and others were added until everyone was satisfied that all aspects that they believed should be assessed to ensure that quality nursing care is provided in a maternity unit were captured. After this process, members of the group assisted in categorising the items in order to assist with developing a logical and easy to use audit tool that would address the concerns and challenges of the auditors, and the nurses responsible for record keeping.

3.5.3.4 Voting on ideas

This step was found to be unnecessary as consensus was reached by members of the group.

3.5.4 Phase 4 – The Delphi group and the focus group of theoretical experts

3.5.4.1 Delphi Group

The Delphi technique is a method used to gain consensus of opinion after wide consultation on a particular problem with a group of experts (McMillan *et a*l., 2016). After the problem has been presented, the participants whose anonymous responses are guaranteed are asked for their agreement or disagreement on a number of propositions / statements. Several rounds of reformulating statements may occur before the predetermined percentage of agreement is reached. Depending on the responses by the participants, statements are reformulated or even eliminated until the desired level of consensus is achieved. This technique favours the respondents in a number of ways, including the reassurance of anonymity, the benefit of exposure to opinions of experts

other than themselves and the option of changing initial opinions during the process without having to justify the change in opinion (Camp *et al.,* 2015; Bulsara *et al.,* 2017).

In this study, the Delphi Technique was used to validate criteria selected by the nominal group for inclusion in an audit tool which would provide an indication of the quality of nursing care rendered in two maternity wards in a private hospital group.

Communication with participants was via e-mail. They were provided with an information letter which also informed that return of the Delphi questionnaire would signal their consent to participate in the study (Annexure 11). Participants were assured that their responses would be anonymous but may be used in successive iterations of the questionnaire until consensus was reached.

The spread sheets (Annexure 12) containing all the elements that the expert group had identified were circulated to the participants in the Delphi study and they were asked to state whether they 'agreed' or 'disagreed' with each statement as well as writing a comment to explain their answer. The scores were then calculated by simple averages and consensus was taken to be 90%. Where there was no consensus, the written comments were used to reword statements in an attempt to make them more acceptable and these were sent in the second and third round until consensus was reached on all statements.

Responses were collated and the information sent back to the respondents requesting their opinion and their comments if desired. After three rounds, 93% consensus was reached. The findings will be discussed in the chapter on this phase of the study, that is, Chapter 6.

3.5.4.2 Focus group of theoretical experts

In a study done by Libakova *et al*.,(2014), interviews with people whose competence in the subject being researched is very high are referred to as theoretical experts. Their significant knowledge in the subject makes the data particularly reliable.

The purpose of using a group of theoretical experts was to establish the clinical utility of the proposed record audit tool. Clinical utility research, also sometimes referred to as clinical effectiveness research, is defined by Beutler *et al*., (1998), as "how one develops knowledge that can be directly used for improving clinical practice".

The phases as outlined by Libakova of a focus group interview with theoretical experts was followed, namely, preparation by planning the questions that will be posed to the group, explaining the background of the research topic, providing them with the relevant material and soliciting their opinions on the questions that have been posed.

Invitees were provided with an information letter, and a request for informed consent to participate (Annexures 13 and 14). With permission from the group, the interview was recorded for later analysis and reporting by the interviewer.

The group concurred on the clinical utility of the record audit tool. Their comments will be presented in Chapter 6.

3.6 DATA ANALYSIS

3.6.1 Phase 1 – Record Audit

The quantitative data were analysed by means of calculating compliance scores. Details of this process are described in Chapter 4.

3.6.2 Phase 2 – Focus Groups

Content analysis was done according to the steps suggested by Braun and Clarke (2006). The phases used for the focus group included:

3.6.2.1 Transcription of data

Participants consented to an audio recording of the discussion for later transcription and data analysis (refer Annexure 4).

Annexure 6 provides an example of a transcript. Numbers were assigned by the researcher to the participants for purposes of identity.

3.6.2.2 Familiarisation with data

The researcher familiarised herself with the data by repeatedly playing the voice recordings and reading the transcriptions. This allowed the researcher to identify meanings and patterns which facilitated the categorisation of the data.

3.6.2.3 Coding

Interesting concepts that appeared to be related to one another were coded by highlighting them in the same colour and then placing them together in a table which facilitated the identification and categorisation of the data.

3.6.2.4 Searching for themes

The coded data were collated into potential themes under which the data could resort.

3.6.2.5 Reviewing themes

The data were reviewed to determine whether they did indeed relate to the major themes which were identified. This phase allowed for movement of data from one category to another to ensure rational placement under a particular theme.

3.6.2.6 Defining and naming themes

Themes were refined by defining and naming them. The definitions provided a comprehensive description of the data set. The analysis of data was presented to the research supervisor, who, together with the researcher, adjusted and refined themes to ensure relevance of the data collated under each of the themes.

3.6.3 Phase 3 – Nominal group, Delphi study and focus group with theoretical experts

The data from the nominal groups and the focus groups were analysed using Braun and Clarke's phases as above.

In the Delphi study, 90% was considered to be consensus. Details provided in Chapter 6. A set of questions was used to garner opinion by the group of theoretical experts on the proposed record audit tool. Consensus was 100%. Details provided in Chapter 6.

3.7 TRUSTWORTHINESS

In this study a combined approach, using some of the strategies described by Creswell (2014) and the five criteria suggested by Lincoln and Guba (1985) and Guba and Lincoln (1994) as cited by Polit and Beck (2008) will be adopted to explain how trustworthiness has been achieved.

The "believability" of the study (Polit & Beck, 2008), was achieved by using recent patient documentation (nursing records) in two active maternity units in the private healthcare group in which the study took place.

Its dependability rests upon the basis that the nurses who participated in the focus groups were all working in the two units at the time and were very familiar with the company's patient documentation, its guidelines for use and the documentation audit processes. Their views were current and spontaneous.

Authenticity was achieved by using direct quotes from participants whose responses were audiotaped. Their directly transcribed opinions presented a vivid picture of the challenges they face when confronted by the need to write up their nursing notes. The nursing experts were all practising nurses in their fields of expertise.

When presented with the findings of the patient documentation audits, the expert group of nurses, all practising in their fields of expertise, agreed that similar recordkeeping

practices were commonly found in other clinical practice environments. Their confirmation for the need to address poor recordkeeping by nurses lends itself to credibility by external readers (Polit & Beck 2008).

Data generation required prolonged engagement. Fifty seven (57) patient files were audited which provided ample opportunity for prolonged engagement with the data. In addition, focus group interviews were held with participants and expert nurses. Interviews were audiotaped and transcribed. Reflection of content was undertaken to promote an insightful interpretation of data. During interviews with focus and expert groups, member checking was achieved by reflecting, clarifying and permitting open discussion. The researcher's supervisor acted as co-coder in the process of analysing this data.

In addition to agreeing or disagreeing with statements on the Delphi Technique Questionnaire, the participants were given the opportunity to comment on the statements – comments and percentages of agreement versus disagreement were communicated to each of the participants with each successive round of questionnaire.

As a strategy to enhance validity (Cresswell 2014; Carter *et al*., 2014; Polit & Beck 2008), triangulation was used in the collection of data from four different sources, namely, patient documentation audits, focus group interviews with nurses who used the documents that formed the focus of the audit and opinions from three groups of expert nurses.

Creswell (2014) also recommends spending "prolonged time in the field" and is of the opinion that the researcher's self-understanding is important. By the nature of her work, the researcher is familiar with the auditing of nursing records.

3.8 ETHICAL CONSIDERATIONS

Ethics approval was obtained from the Human Ethics Research Committee of the University of Witwatersrand and permission to conduct the study was obtained from the private healthcare facility in which the study was conducted.

The four ethical principles suggested by Beauchamp & Childress (2009) were used to guide this study.

3.8.1 Autonomy

This principle relates to the right for an individual to make his or her own choice. This assumes that the person has the capacity to act intentionally, with understanding and will not be coerced into making a decision. This principle is the basis of informed consent (McCormick, 2013).

In this study, participants were provided with adequate information to allow them to make an informed decision as to whether or not they were willing to participate in the study. The purpose of the study was explained and clarified. They were assured that there would be no risk or penalty as a result of their participation. The informed consent which they signed provided for voluntary participation as well as their freedom to withdraw from the study at any time.

3.8.2 Beneficence

This principle relates to acting with the best interest of the other person.

In this study, there was no risk or discomfort to participants, but, equally there was no direct benefit to the participants who were informed of this in the information letter they were given as part of the informed consent procedure. Confidentiality of information was guaranteed. The researcher ensured that there will be no way of tracing information back to any one of the participants, or to the patient files used in this study. Confidentiality of the health information gained from the patient documentation was assured by maintaining the anonymity of the names on patient documents.

Participants were assured that the results of the study would be freely available to them on completion of the study.

Interviews were conducted in an environment conducive to ensuring the privacy of participants.

3.8.3 Non-Maleficence

This principle refers to the researcher not acting in any way that would bring harm to the participant, either through commission or omission. This principle affirms the need for the researcher to carry out the study in a competent manner to ensure no harm does occur to participants. The nature of this study did not involve any potentially harmful practices.

3.8.4 Justice

This principle refers to a concept that all participants were treated with fairness and equity. Justice was ensured by selecting and treating all respondents fairly and treating them with respect. Respondents were selected for reasons directly related to the research problem and not because they were readily available or could be easily manipulated.

3.9 CONCLUSION

In this chapter, the research methodology has been described. Chapters 4, 5 and 6 will detail the findings of each phase of the study.

CHAPTER 4 : FINDINGS AND DISCUSSION OF PHASE 1 – RECORD AUDITS

4.1 INTRODUCTION

This chapter will present a detailed description of the findings of data collection for Phase 1 of the study, namely, the record audit. The purpose of this phase was to determine the validity of the patient audits done according to the existing audit tool. The term 'validity' for the purposes of this study was taken to mean "the quality of being logically or factually sound; soundness or cogency" (Oxford Living Dictionary, 2018). The term 'cogency' refers to whether a statement is clearly expressed and persuades people to believe it. The findings of the audit results of each hospital will first be presented (Hospital A with 27 files and Hospital B with 30 files) followed by the results of the combined sample of both hospitals (57 files). Following this, the comparison between the hospital audits and the researcher audits done on the 25 files from hospital A will be presented.

The facilities in which the study was conducted use standardised patient documentation; documentation developed by a committee consisting of registered midwives selected by the Nursing Department of the private healthcare facility. The documentation is combined in the form of a booklet, each page used for recording different information. The guidelines on how to use the booklet are published on the facility's internal network to which all of the facility's employees have access. The audit tool is aligned to measure compliance to recordkeeping in line with the requirements of the documents used.

4.2 EXPLANATION OF THE CONTENT OF THE AUDIT

In order to interpret the data, an explanation is given here of the criteria for each of the sections of the audit tool (the main element underlined – sub-elements indicated by bullets). The nursing content of the audit tool is based on a framework for nursing provided by the Joyce Travelbee model for the Nursing Process, according to which an assessment must be performed to identify / diagnose a nursing need, nursing interventions must be planned and implemented to address the need, and the patient's response to the interventions must be evaluated (Freitas *et al.*, 2018). The elements and

the sub-elements in the nursing care section of the tool are derived from Regulation 2598, 1984, Chapter 2.

The score achieved for the main element of each section is a composite of the scores achieved for the sub-elements.

Patient assessment:

- Baseline assessment data established on admission
- Critical indicators for care identified *
- Re-assessment done

Explanation:

The admission nurse is expected to assess the patient on admission with specific reference to the medical diagnosis and the associated nursing needs and health problems, that is, the nursing diagnoses. The *base line assessment* includes a medical and surgical history, a family history and an obstetric history. The record must provide evidence of both a subjective and an objective patient assessment. Vital data (pulse, temperature, respiration and blood pressure) and abdominal examination form part of the information obtained on objective assessment. When relevant, a vaginal examination forms part of the assessment on admission. The purpose of the baseline assessment is to provide a yardstick against which evaluation of response to medical and nursing interventions can be based and to identify any risk factors that may influence the nursing care required by the patient.

Critical indicators are those specific to the patient, for example, if the foetus is deemed to be at risk, it would be a critical indicator for care and nursing interventions would be directed at frequent assessment of parameters of foetal well-being.

Frequency and nature of *reassessment* is determined by the patient's condition. A routine reassessment is expected at least twice in 24 hours – once by day staff and once by night staff.

Legal medical prescription and doctor's progress notes (multi-disciplinary team):

- Medication recorded by Dr / RN on prescription chart according to legal requirements
- Medication correctly administered according to Dr's prescription
- Multi-disciplinary clinical progress notes recorded

Explanation:

The nurse is expected to encourage the doctor to write his / her prescription in such a manner that medicines can be dispensed by the Pharmacy Department *legally* and that medicine is administered within the legal framework for nursing; for example, a Schedule 6 medicine may not be administered unless certain requirements for prescription are met such as the writing out the number times that the medication can be given, the frequency and more. The reference to the *registered nurse (RN)* is related to the receipt of telephonic prescriptions by a doctor, referring to the organisation's policy regarding telephonic prescriptions.

The record of *multi-disciplinary clinical progress notes* refers to the nurses' records of visits, instructions, requests by members of the multi-disciplinary team. Members of the multi-disciplinary team are invited to write their own notes in this section of the documents and some make use of this invitation.

Nurse care programme:

- Critical indicators prioritised in patient care plan *
- Nursing care executed in line with priorities - actioned and recorded *
- Patient education given and recorded
- Patient information given and recorded

Explanation:

The nurse is expected to rank *critical indicators in terms of priority* in the care plan and to record the interventions (medical and nursing) to address the indicators.

Execution of nursing care in line with priorities refers to the expectation that the medical or nursing prescription related to the critical indicators has been rendered and its rendition recorded, for example – in relation to foetal well-being the intervention may be to perform a CTG immediately on admission and to commence the recording of foetal movement on a *Foetal Movement Chart*. The nurse would be expected to record that these actions have been carried out.

Patient education would need to accompany these actions and the nurse would be expected to record that it had been given and the mother's understanding of / response to the education.

The document used in the facility contains a box in which topics for health education are listed. The nurse is required to indicate that health education has been given by placing a tick (✓) accompanied by his / her initials in the column alongside the topic.

Patient information refers to the information regarding matters such as ward routines, visiting times and chaplain's visits. A box requiring ticks alongside the topic of information given serves as an indication that the information was given.

Progress monitoring

- Nursing care evaluated (critical care indicators as well as progress) *
- Nursing care plan updated where needed *
- Appropriate referrals recorded
- Medical prescription updated, executed and recorded
- Effect of medication / treatment monitored and recorded

Explanation:

Nurses are expected to *reassess* their patients at least once a day and once a night and more frequently if the patient's condition warrants it. The assessment is expected to be specific to the *critical care indicators* that were identified on admission / previous assessment. Recording of the patient's progress or lack thereof in relation to the care that was prescribed is expected.

The patient's improvement / deterioration will require amendments to the care plan. The nurse, acting either independently or on the instruction of the doctor is expected to record *referrals*, for example, if foetal movement is unsatisfactory, the patient may be referred to the Radiography Department for ultrasound to exclude post-maturity. It is expected that the action and its completion will be recorded.

If a medical prescription changes in any way, the nurse is expected to record the change and record the actions associated with the change.

The nurse is expected to record the patient's *response to medication administered and treatment* such as physiotherapy.

Infection prevention and 'Best care always':

- Risk factors identified and recorded
- Appropriate action for identified risks taken and recorded

Explanation:

These criteria are specifically related to the *prevention of hospital acquired infection (HAI)* and the appropriate use of antibiotics. The criteria are based on those identified by the 'Best Care Always' Campaign that emanated from similar campaigns in other countries such as the 'Safer Health Care Now' and the '100K lives' campaign, both of which recognised the need for implementation of strategies for measuring HAIs and for implementing practices for prevention (Best Care Always, 2011; Health and Medical Publishing Group, 2014).

In the facilities in which the audits were conducted, a number of criteria are routinely regarded as risk factors and must be assessed daily; for example, if the patient has an intravenous line in situ, the number of days it has been in situ must be recorded in a specially reserved box on the nursing documentation. This is done to ensure that the line is changed within a specific time frame in order to prevent a bloodstream infection. Criteria

relevant to the maternity ward and appearing in the box are peripheral lines and urinary catheters.

Safe environment and immediate ward environment:

- Risk factors identified and recorded *
- Preventative measures taken and recorded

Explanation:

These criteria are specifically related to safety. As with the element on infection prevention, a specially reserved box on the nursing documentation allows for routine assessment of certain parameters; for example, the checking of oxygen outlets, functionality of call bells and others. None of these criteria are specific to issues of safety in a maternity ward such as baby identification, security regarding admission to the ward and proper labelling of expressed breast milk among others.

Legal compliance:

- Legible handwriting
- Correct dates and times
- Only authorised abbreviations used
- Signature, qualifications

Criteria are self explanatory.

Case management:

- Case manager visit recorded when expected patient outcomes not reached
- Appropriate referrals recorded
- Correct authorisation for level of care
- Authorisation for second procedure obtained
- Motivation for use of specialisation units obtained
- Patient isolation motivation obtained

Explanation:

Patients who have medical insurance are required to have authorisation for factors such as admission, length of stay and others. If, for example, the authorised length of stay has

been exceeded, a new authorisation must be obtained. Case managers are expected to monitor the factors related to a particular patient's authorisation and to notify the medical funders of the need for additional authorisation. The nurse is expected to record the *case manager's visit* if and when it becomes necessary.

If *referrals outside of the original authorisation* are made, these must be recorded by the nurse for the attention of the case manager. For example, if while the mother is in hospital for control of Diabetes, the obstetrician decides to refer to a physician, the referral must be authorised.

The *level of care* may change from being of a minor acuity to a major acuity. For example, a pre-eclamptic patient may require intensive care which would demand additional resources. Such care must be authorised by the funder.

Authorisation for a second procedure refers for example, to a mother who decides that she will have a tubal ligation (sterilisation) while undergoing a Caesarean Section. If the sterilisation was not part of the original authorisation, the new procedure will require a new authorisation.

Motivation for use of specialised units obtained refers to the need for transfer usually to an Intensive Care unit and in the maternity ward is most often associated with the need for the baby to be transferred to Neonatal Intensive Care. The motivation must be provided by the doctor but the nurse must ensure that it has been done and record same. The medical insurer must approve the motivation.

The patient's doctor must motivate the *need for isolation* to the medical insurer. The nurse is expected to ensure that it has been done and record same.

All of the above are necessary to ensure that the medical insurer is appropriately billed and has authorised the additional care. Isolation, increasing levels of care, admission in intensive care units all involve additional resources such as equipment and more

expensive staffing models and unless authorised by the medical insurer, costs will have to be recovered from the patient, putting the hospital at risk for non-recovery.

Nursing responsibility for accurate charting:

- Final diagnosis correct *
- Co-morbidities identified and documented
- Ward equipment charged
- Correct charting of all stock used *
- Credits of medication correctly done on discharge
- Signed discharge or transfer date and times by the doctors/nurse
- Clear evidence that patient movement (discharge) has been communicated & actioned to relevant department (reception) within 1 hour of movement of patients*

Explanation:

The nurse is expected to check that the doctor records the *final diagnosis* when discharging the patient. If incorrect, coding for payment by the medical insurer will also be incorrect and the bill will either be rejected by the funder or incorrect payment made.

Co-morbidities which may impact on authorised length of stay or result in complications must be recorded for attention by the case manager, again related to possible rejection of a final bill submitted to the funder for payment.

The *charging of ward equipment* and *charting of all stock used* is important to ensure that the final bill is correct. The nurse is expected to chart stock and charge equipment as soon as it is used.

Credits of medication refers to medicine that has not been used and must be sent back to the Pharmacy Department. The reason for accuracy of credits is related to correct billing. For example, if the medicines are returned to the Pharmacy and the funder is billed because the credits have not been recorded, the bill may be questioned by the funder and payment delayed.

It is important that *discharge / transfer dates and times* are correctly recorded as they impact on billing for length of stay. The nurse is expected to check the accuracy of the records before they are sent to the Patient Services Department for final billing.

Patient movement / discharge, impacts on the time allowed for final billing which in turn impacts on debtor's days (a financial measure). To achieve hospital targets for debtor's days, the patient file must be prepared by ward staff for dispatch to the Patient Services Department within a specified time.

The criteria marked with an asterisk (*) are considered critical points and are weighted when calculating compliance scores. A score of 2 is given for a 'normal' criterion if it is met, but if it is deemed to be a critical score, it is given a 4. Partial compliance warrants a 1 for normal criteria and a 2 for a critical point and 0 means non compliant for both. 'Normal' criteria can be marked as 'non applicable' while this is not possible for critical points. In some cases no data was recorded presumably as it was not relevant in which case the scores are calculated based on those criteria that were assessed, that is, the denominator will change if there were 'non applicable' criteria.

All calculations are performed automatically by the *Data Capture System* developed by the private healthcare facility to capture and process the data obtained from the audit. Capturing of the data is a manual process.

As can be seen, a number of criteria, some of which are regarded as critical points, are in fact unrelated to actual nursing care but are arguably related to a quality experience for the patient, for example, correct billing.

Some of the non-nursing related criteria can be useful in the investigation of adverse events, patient complaints or enquiries by medical funders. For example, if additional surgery such as a sterilisation has been performed without authorisation, the stock used and billed during the operation can provide evidence of the nature and extent of the surgery.

4.3 QUANTITATIVE RESULTS FROM THE AUDITS

4.3.1 Results of the Audit of Hospital A

Definitions of the headings used in the tables will be found in Annexure 15.

Table 4.1: Audit results of the 27 files audited from Hospital A

	CRITERIA	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
1.	Patient assessment:	159	153	216	81	3	210	76%	73%
1.1	Baseline assessment data established on admission	36	36	54	27	1	52	69%	69%
1.2	Critical indicators for care identified *	78	72	108	27	0	108	72%	67%
1.3	Re-assessment done	45	45	54	27	2	50	90%	90%
2.	Legal medical prescription and doctor's progress notes:	94	94	162	81	33	96	98%	98%
2.1.	Medication recorded by Dr / RN on prescription chart according to legal requirements	46	46	54	27	4	46	100%	100%
2.2	Medication correctly administered according to Dr's prescription	44	44	54	27	4	46	96%	96%
2.3	Multi-disciplinary clinical progress notes recorded	4	4	54	27	25	4	100%	100%
3.	Nurse care programme	178	155	324	108	5	314	57%	49%
3.1	Critical indicators prioritised in patient care plan *	84	80	108	27	0	108	78%	74%
3.2	Nursing care executed in line with priorities - actioned and recorded *	35	16	108	27	0	108	32%	15%
3.3	Patient education given and recorded	22	22	54	27	2	50	44%	44%
3.4	Patient information given and recorded	37	37	54	27	3	48	77%	77%

	CRITERIA	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
4.	Progress monitoring	220	215	378	135	58	262	84%	82%
4.1	Nursing care evaluated (critical care indicators as well as progress) *	91	88	108	27	0	108	84%	81%
4.2	Nursing care plan updated where needed *	86	84	108	27	0	108	80%	78%
4.3	Appropriate referrals recorded	3	3	54	27	25	4	75%	75%
4.4	Medical prescription updated, executed and recorded	2	2	54	27	25	4	50%	50%
4.5	Effect of medication / treatment monitored and recorded	38	38	54	27	8	38	100%	100%
5.	Infection prevention and 'Best care always'	50	50	108	54	29	50	100%	100%
5.1	Risk factors identified and recorded	30	30	54	27	12	30	100%	100%
5.2	Appropriate action for identified risks taken and recorded	20	20	54	27	17	20	100%	100%
	CRITERIA	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
6.	Safe environment and immediate ward environment	116	116	162	54	21	120	97%	97%
6.1	Risk factors identified and recorded *	104	104	108	27	0	108	96%	96%
6.2	Preventative measures taken and recorded	12	12	54	27	21	12	100%	100%
7.	Legal compliance	191	191	216	108	4	208	92%	92%
7.1	Legible handwriting	49	49	54	27	1	52	94%	94%
7.2	Correct dates and times	45	45	54	27	1	52	87%	87%
7.3	Only authorised abbreviations used	49	49	54	27	1	52	94%	94%
7.4	Signature, qualifications	48	48	54	27	1	52	92%	92%
8.	Case management	0	0	324	162	162	0	No score	No score

	CRITERIA	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
8.1	Case manager visit recorded when expected patient outcomes not reached	0	0	54	27	27	0	No score	No score
8.2	Appropriate referrals recorded	0	0	54	27	27	0	No score	No score
8.3	Correct authorisation for level of care	0	0	54	27	27	0	No score	No score
8.4	Authorisation for second procedure obtained	0	0	54	27	27	0	No score	No score
8.5	Motivation for use of specialisation units obtained	0	0	54	27	27	0	No score	No score
8.6	Patient isolation motivation obtained	0	0	54	27	27	0	No score	No score
9.	Nursing responsibility for accurate charting	392	392	540			412	95%	95%
9.1	Final diagnosis correct *	96	96	108	27	0	108	89%	89%
9.2	Co-morbidities identified and documented	0	0	54	27	27	0	No score	No score
9.3	Ward equipment charged	36	36	54	27	9	36	100%	100%
9.4	Correct charting of all stock used *	104	104	108	27	0	108	96%	96%
9.5	Credits of medication correctly done on discharge	4	4	54	27	25	4	100%	100%
9.6	Signed discharge or transfer date and times by the doctors/nurse	48	48	54	27	3	48	100%	100%
9.7	Clear evidence that patient discharge has been communicated & actioned to reception within 1 hour of movement of patients	104	104	108	27	0	108	96%	96%
	Complete score:	1400	1366	2430	783	315	1672	84%	82%

Patient assessment:

An overall standard score of 76% and a critical score of 72% was achieved for this element.

Poor scores (69%) were received for *baseline assessment data established on admission* mainly because of omissions to complete the front page of the document. For example, the document requires the nurse to place a tick (✓) in the appropriate column if the patient responds affirmatively to any of the questions regarding previous illnesses or a family history of certain illnesses. A frequent finding was that the tick was placed in the appropriate column but no detail would be given.

Poor standard and critical scores (72% and 67% respectively) were received for *critical indicators for care identified*, which, according to the audit tool, is a critical point. However, on the majority of the patient files audited, critical indicators for care were noted as being "pain control, safety, hygiene and nutrition". With the exception of pain control which may be a critical need during labour or post-operatively, the other needs are routine and applicable to all patients, including patients in general wards. In certain cases, a 'critical indicator' may have been recorded but was not carried through to a care plan. As an example, on one file, it was noted that haemorrhoids was a critical indicator for care but there was no further reference to the patient's haemorrhoids in the entire nursing record. The document used in the facilities accommodates recording of two assessments / 24 hours for three days – the average length of stay for a maternity patient in the facility. These reassessments were done in most instances, but as with the initial assessment, certain aspects that were considered to be needs, were ticked as such but not followed through in care plans or progress reports. Although scores were higher than the previous two sub-elements of *Patient Assessment*, they could have been even higher if extended to care plans and progress reports. Both standard and critical scores of 90% were achieved.

Legal medical prescription and Dr's clinical progress notes (multi disciplinary team)

Nurses in Hospital A were diligent in ensuring that doctors wrote their prescriptions according to legal requirements, that medicine was correctly administered according to prescription and that members of the multi-disciplinary team recorded their progress notes. The hospital scored 100% for this element.

Nurse care programme

The nurse care programme did not fare well with an overall standard score of 57% and a critical score of 49%.

While the standard score for *critical indicators prioritised in patient care plan* was 78% and the critical score 74%, true critical indicators were not always identified and therefore not carried through to a care plan. There was also no evidence of indicators being prioritised.

In terms of *nursing care executed in line with priorities*, this particular element was frequently ignored in the nurses' reports resulting in a standard score of 32% and a critical score of 15%. In one particular instance, a critical indicator for care was recorded as 'pad checks' for a patient who was admitted in premature labour. Apart from no evidence that this 'indicator' had been prioritised in a care plan, there was no further record of a 'pad check' in the nursing notes. The notes did, however, indicate that the patient reported that there was no vaginal loss. A care plan would have stipulated whether the check was to be carried out and reported on by the patient or whether a physical check was to be done by the nurse.

The nurse care programme required that patients *receive education* and that such education be recorded. Low scores were awarded for this element – 44% for standard and critical scores, mainly because education had either not been given or the record simply stated that "patient education was given". In a number of instances, the education given was recorded as a list, such as "diet, sleep, exercise, breastfeeding", without any

indication of the scope of the education or the patient's response to and understanding of the education. In one file, the record indicated that the patient "must exercise every day".

Non-compliance for the sub-element *Patient Information Given and Recorded* was mainly in the form of failure to tick all the boxes requiring a tick or to tick them in such a way that the reader would not be sure if the mark in the box was a tick or a strike through.

Progress monitoring

An overall standard score of 84% and a critical score of 82% was awarded for this element. However, the score, being the average of the scores achieved for the sub-elements reached this level mainly because of the 100% achieved for *recording the effects of medication* which was administered.

This section of the audit tool focused on the patient progress report and although critical indicators for care were not always recorded in a care plan, they did appear indirectly in the progress report and credit was given (80% standard score and 78% critical score). For example, a record in one file informed that the doctor was happy with the patient's progress and the pressure bandage was to be removed. There had been no mention of a pressure bandage in the care plan, where it had been applied, or the reason for its use.

75% was achieved for both the standard and the critical scores for the recording of *appropriate referrals*. In a number of instances, it was clear from other records, such as a report from the Radiology Department that the patient had been referred but not recorded in the progress report. There would also be no evidence that the patient's doctor had been informed of the report.

Both a standard and a critical score of 100% was achieved for the sub-element – *effect of medication / treatment monitored and recorded.*

Infection prevention and 'Best Care Always':

100% compliance was achieved for both standard and critical scores.

Safe patient environment and immediate ward environment:

The overall score for this element was 97% for both standard and critical.

A score of 96% for both standard and critical was achieved for the identification and recording of risk factors; the loss of points mainly due to omission to tick all of the boxes all of the times.

A score of 100% was awarded ensuring that preventive measures were taken and recorded – this almost by default due to records that showed that cot sides were in place on the patient's return from theatre, or after having received Schedule 6 analgesia. In the absence of a definite record, there was no real evidence to decide on whether preventative measures had been put in place or not.

Legal Compliance:

None of the sub-elements of this criterion was regarded as critical and therefore standard and critical scores were the same in each instance.

Legible handwriting scored a 92%.

Correct dates and times scored a 94% and in certain instances resulted in a lack of clarity. In one file, the time of the baby's birth was recorded as being 19h30 and education on breastfeeding was given at exactly the same time. There were also a number of occasions when an entry such as "patient to go for scan on Monday" would be made.

94% was scored for the element '*only authorised abbreviations use*d'. Some nurses tended to use their own abbreviations or acronyms for procedures that had been performed. One patient signed consent for a 'LLLETZ' and since the peri-operative record had not been completed, the researcher could not determine what procedure the patient had undergone.

Not all entries met the requirement of the accompaniment of signatures and qualifications resulting in a score of 92% for this sub-element.

Case management

This element did not receive any scores for the reasons cited in paragraph 4.3.5.

Nursing responsibility for accurate charting:

Overall standard and critical scores of 95% were achieved for this element.

Three sub-elements were regarded as critical, namely – *a correct record of the final diagnosis* (standard and critical score both 89%), *correct charting of all stock used* (standard and critical score of 96%) and clear evidence that *patient movement* (discharge) has been communicated and actioned to relevant department within one hour of movement (standard and critical score of 96%).

Final diagnoses recorded in vague terms such as 'Observation' and 'Pregnancy', were evident and were not awarded scores. In some instances no final diagnosis was recorded.

Co-morbidities received no score since in the files audited, none of the patients had co-morbidities or, if they did, they were not apparent in any of the records audited. Reasons for this may be varied and among others, include non-disclosure or the apparent good health of most pregnant women who are in a position to enjoy private healthcare.

Signed discharge or transfer date and times by the doctors / nurse received a score of 100%.

A score of 96% was awarded for the final sub-element – clear evidence of patient movement. Failure to achieve 100% could be due to the fact that when patients are discharged at weekends, or after normal office hours, the dispatch of the file is delayed until the start of the new working week or the new working day.

4.3.2 Results of the audit of Hospital B

Table 4.2: Audit results of the 30 files audited from Hospital B

	Criteria	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
1.	Patient assessment:	175	168	236	88	0	236	74%	71%
1.1	Baseline assessment data established on admission	38	38	60	30	0	60	63%	63%
1.2	Critical indicators for care identified *	83	76	120	30	0	120	69%	63%
1.3	Re-assessment done	54	54	56	28	0	56	96%	96%
2.	Legal medical prescription and doctor's progress notes:	112	112	180	90	33	114	98%	98%
2.1.	Medication recorded by Dr / RN on prescription chart according to legal requirements	55	55	60	30	2	56	98%	98%
2.2	Medication correctly administered according to Dr's prescription	55	55	60	30	2	56	98%	98%
2.3	Multi-disciplinary clinical progress notes recorded	2	2	60	30	29	2	100%	100%
3.	Nurse care programme	188	161	360	120	4	352	53%	46%
3.1	Critical indicators prioritised in patient care plan *	73	68	120	30	0	120	61%	57%
3.2	Nursing care executed in line with priorities - actioned and recorded *	22	0	120	30	0	120	18%	0%
3.3	Patient education given and recorded	42	42	60	30	3	54	78%	78%
3.4	Patient information given and recorded	51	51	60	30	1	58	88%	88%
4.	Progress monitoring	224	210	420	150	61	298	75%	70%
4.1	Nursing care evaluated (critical care indicators as well as progress) *	74	64	120	30	0	120	62%	53%
4.2	Nursing care plan updated where needed *	92	88	120	30	0	120	77%	73%
4.3	Appropriate referrals recorded	2	2	60	30	29	2	100%	100%

	Criteria	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
4.4	Medical prescription updated, executed and recorded	6	6	60	30	27	6	100%	100%
4.5	Effect of medication / treatment monitored and recorded	50	50	60	30	5	50	100%	100%
5.	Infection prevention and 'Best care always'	88	88	120	60	16	88	100%	100%
5.1	Risk factors identified and recorded	44	44	60	30	8	44	100%	100%
5.2	Appropriate action for identified risks taken and recorded	44	44	60	30	8	44	100%	100%

	Criteria	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
6.	Safe environment and immediate ward environment	180	180	180	60	0	180	100%	100%
6.1	Risk factors identified and recorded *	120	120	120	30	0	120	100%	100%
6.2	Preventative measures taken and recorded	60	60	60	30	0	60	100%	100%
7.	Legal compliance	210	210	240	120	1	238	88%	88%
7.1	Legible handwriting	52	52	60	30	0	60	87%	87%
7.2	Correct dates and times	49	49	60	30	1	58	84%	84%
7.3	Only authorised abbreviations used	58	58	60	30	0	60	97%	97%
7.4	Signature, qualifications	51	51	60	30	0	60	85%	85%
8.	Case management	0	0	360	180	180	0	No score	No score
8.1	Case manager visit recorded when expected patient outcomes not reached	0	0	60	30	30	0	No score	No score
8.2	Appropriate referrals recorded	0	0	60	30	30	0	No score	No score
8.3	Correct authorisation for level of care	0	0	60	30	30	0	No score	No score
8.4	Authorisation for second procedure obtained	0	0	60	30	30	0	No score	No score
8.5	Motivation for use of specialisation units obtained	0	0	60	30	30	0	No score	No score

	Criteria	Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
8.6	Patient isolation motivation obtained	0	0	60	30	30	0	No score	No score
9.	Nursing responsibility for accurate charting	453	453	600			456	99%	99%
9.1	Final diagnosis correct *	120	120	120	30	0	120	100%	100%
9.2	Co-morbidities identified and documented	0	0	60	30	29	2	0%	0%
9.3	Ward equipment charged	24	24	60	30	18	24	100%	100%
9.4	Correct charting of all stock used *	120	120	120	30	0	120	100%	100%
9.5	Credits of medication correctly done on discharge	12	12	60	30	24	12	100%	100%
9.6	Signed discharge or transfer date and times by the doctors/nurse	57	57	60	30	1	58	98%	98%
9.7	Clear evidence that patient discharge has been communicated & actioned to reception within 1 hour of movement of patients	120	120	120	30	0	120	100%	100%
	Complete score:	1630	1582	2696	868	295	1962	83%	81%

Patient assessment:

An overall standard score of 74% and a critical score of 71% was achieved for this element.

Both standard and critical scores for *baseline assessment* reflected a score of 63%. As with Hospital A, reasons for non-compliance were mostly related to omission to fully complete the information required, failure to record detail of medical, surgical and family history. In the case of one patient who reported that she was still being treated for Bronchitis, no detail was given regarding how long she had been ill, whether or not she was on treatment or if her illness had responded to treatment.

The sub-element related to the *identification of critical indicators* for care received low scores – a standard score of 69% and a critical score of 63% which seemed to indicate a

lack of understanding or insight into the difference between critical indicators for care and routine indicators for care. One patient was admitted for observation and blood tests but there was no indication of why she was being observed – reasons for observation would have amounted to critical indicators for care – or what blood tests were going to be done.

The scores for having done a *reassessment* were 96% for both critical and standard. Generally it was found that both day and night staff completed the assessment page in the maternity document but as with Hospital A, there was little insight into critical indicators for care and almost no follow through of identified needs / problems to the care plan or progress report.

Legal, medical prescription and Dr's clinical progress notes (multi disciplinary team):

An overall score of 98% was achieved. The score reflected a good understanding by the nurses of the requirements for complying to this element.

Nursing care programme:

An overall standard score of 53% and a critical score of 46% was achieved reflecting an omission to distinguish between *critical indicators for care* and routine indicators (standard score of 61% and critical score of 57%) and because critical indicators were not identified, *nursing care was not executed in line with priorities, actioned or recorded* (critical and standard scores of 18% and 0% respectively).

While *patient education* was given, it was non-specific and reflected in the documentation simply as having been given, resulting in scores of 78% for both standard and critical.

As in the case of Hospital A, the loss of marks for compliance with respect to *patient information* having been given was due largely to failure to tick all the blocks in the box reserved for this purpose or not completing the box at all.

Progress monitoring:

75% and 70% were the overall standard and critical scores for this element. In the researcher's opinion, if scores for *patient assessment* and the *nursing care programme* were low, scores for this element could not be much higher since assessment should result in the identification of a nursing need or problem. A plan should then be developed to address the need and the progress report should reflect the patient's response to the measures implemented to address the need.

Entries in the progress reports were vague and irrelevant, consisting of statements such as "breathing on room air", "no complaints verbalised", "vital signs normal" with no real evidence of the *evaluation of care in terms of critical indicators and progress* for which standard and critical scores of 62% and 53% respectively were awarded.

An example of the evening's report on one file read "Patient received from night staff in a satisfactory condition. Pain score 2/10, Waterlow – 3, Risk of falling – 0". This was for a patient who had delivered her baby via normal vaginal delivery two days previously and was for discharge on the day that the report was written. The Waterlow Scale is a tool used for assessing the risk of developing pressure ulcers, and a tool called the Heinrich II Model for Risk of Falling is used to assess a patient's risk for falling. Neither of these assessments or record thereof would have been relevant for this particular patient but this serves as a good example of the nurses' complaints which were raised in the focus group discussions of having to complete certain documentation simply to satisfy the requirements of the audit tool.

The *updating of the nursing care* plan received standard and critical scores of 77% and 73% respectively and did not achieve target mainly because no real problems were identified which could have been included in a plan. Planning was almost ad hoc. A patient admitted for haematuria was a case in question where although there was no formal plan in place, an entry in the progress report indicated that urine had to be tested with Dipstix and had to be sent for tests to the laboratory.

Both standard and critical scores of 100% were achieved for the sub-elements appropriate *referrals recorded, medical prescription updated and recorded and effect of medication / treatment monitored and recorded.*

Infection prevention and 'Best Care Always':

Both standard and critical scores of 100% were achieved.

Safe patient environment and immediate ward environment:

Both standard and critical scores of 100% were achieved.

Legal compliance:

Both standard and critical scores of 88% were achieved.

87% for both standard and critical scores were achieved for *legibility of handwriting*. This is not a critical criterion but can play an extremely important role when adverse events are under investigation.

84% for both standard and critical was achieved for *correct dates and times*. Points were lost due failure to record dates and times – sometimes both and sometimes one or the other.

97% for both standard and critical was achieved for using only *authorised abbreviations*. Unauthorised abbreviations were the exception rather than the rule.

Case management:

This section of the audit tool was regarded as not applicable probably because the patients whose files were audited did not require additional authorisation.

Nursing responsibility for accurate charting:

An overall score of 99% was achieved for this element. The high scores reflect the importance relegated by the organisation to the information required by medical funders

and the associated impact of preparing the patient's file for final billing. As at Hospital A, the ward secretary contributes to the high scores achieved by this element by checking the file before it leaves the ward for further management by the Patient Services Department.

4.3.3 Comparison between standard and critical scores of Hospital A and B

Table 4.3. Comparison between standard and critical scores of Hospital A and Hospital B

			Hospital A		Hospital B	
	Critical Point	Criteria	Standard score	Critical score	Standard score	Critical score
1		PATIENT ASSESSMENT	76%	73%	74%	71%
1.1		Baseline assessment data established on admission	69%	69%	63%	63%
1.2	*	Critical indicators for care identified	72%	67%	69%	63%
1.3		Re-assessment done	90%	90%	96%	96%
2		LEGAL, MEDICAL PRESCRIPTION & DRS PROGRESS NOTES	98%	98%	98%	98%
2.1		Medication recorded by Dr / RN on prescription chart according to legal requirements	100%	100%	98%	98%
2.2		Medication correctly administered according to Dr's prescription	96%	96%	98%	98%
2.3		Multi-disciplinary clinical progress notes recorded	100%	100%	100%	100%
3		NURSING CARE PROGRAMME	57%	49%	53%	46%
3.1	*	Critical indicators prioritised in patient care plan	78%	74%	61%	57%
3.2	*	Nursing care executed in line with priorities - actioned and recorded	32%	15%	18%	0%
3.3		Patient education given and recorded	44%	44%	78%	78%
3.4		Patient information given and recorded	77%	77%	88%	88%
4		PROGRESS MONITORING	84%	82%	75%	70%
4.1	*	Nursing care evaluated (critical care indicators as well as progress)	84%	81%	62%	53%
4.2	*	Nursing care plan updated where needed	80%	78%	77%	73%
4.3		Appropriate referrals recorded	75%	75%	100%	100%

			Hospital A		Hospital B	
	Critical Point	Criteria	Standard score	Critical score	Standard score	Critical score
4.4		Medical prescription updated, executed and recorded	50%	50%	100%	100%
4.5		Effect of medication / treatment monitored and recorded	100%	100%	100%	100%
5		INFECTION PREVENTION AND 'BEST CARE ALWAYS'	100%	100%	100%	100%
5.1		Risk factors identified and recorded	100%	100%	100%	100%
5.2		Appropriate action for identified risks taken and recorded	100%	100%	100%	100%

			Hospital A		Hospital B	
	Critical Point	Criteria	Standard score	Critical score	Standard score	Critical score
6		SAFE PATIENT ENVIRONMENT & IMMEDIATE WARD ENVIRONMENT	97%	97%	100%	100%
6.1	*	Risk factors identified and recorded	96%	96%	100%	100%
6.2		Preventative measures taken and recorded	100%	100%	100%	100%
7		LEGAL COMPLIANCE	92%	92%	88%	88%
7.1		Legible handwriting	94%	94%	87%	87%
7.2		Correct dates and times	87%	87%	84%	84%
7.3		Only authorised abbreviations used	94%	94%	97%	97%
7.4		Signature, qualifications	92%	92%	85%	85%
8		CASE MANAGEMENT	No score	No score	No score	No score
8.1		Case manager visit recorded when expected patient outcomes not reached	No score	No score	No score	No score
8.2		Appropriate referrals recorded	No score	No score	No score	No score
8.3		Correct authorisation for level of care	No score	No score	No score	No score
8.4		Authorisation for second procedure obtained	No score	No score	No score	No score
8.5		Motivation for use of specialisation units obtained	No score	No score	No score	No score
8.6		Patient isolation motivation obtained	No score	No score	No score	No score
9		NURSING RESPONSIBILITY FOR ACCURATE CHARTING	95%	95%	99%	99%
9.1	*	Final diagnosis correct	89%	89%	100%	100%

			Hospital A		Hospital B	
	Critical Point	Criteria	Standard score	Critical score	Standard score	Critical score
9.2		Co-morbidities identified and documented	No score	No score	0%	0%
9.3		Ward equipment charged	100%	100%	100%	100%
9.4	*	Correct charting of all stock used	96%	96%	100%	100%
9.5		Credits of medication correctly done on discharge	100%	100%	100%	100%
9.6		Signed discharge or transfer date and times by the doctors/nurse	100%	100%	98%	98%
9.7	*	Clear evidence that patient movement (discharge) has been communicated & actioned to relevant department (reception) within 1 hour of movement of patients	96%	96%	100%	100%
		Complete scores	84%	82%	83%	81%

Although the complete scores for both hospitals were similar, there were some differences in scores for some of the elements and their sub-elements.

Patient assessment:

Hospital A achieved an overall standard score of 76% and a critical score of 73% for *Patient assessment* while Hospital B achieved 74% and 71% respectively.

There was a difference of 6% in Hospital A's favour in terms of *establishing a baseline assessment* on admission, a 5% difference in standard scores and a 6% difference for *identifying critical indicators* for care, again in Hospital A's favour. This seems to indicate that nurses in Hospital A had a better understanding of the distinction between a critical indicator for care than the nurses in Hospital B. It could also have been an indication that registered midwives rather than enrolled nurses were responsible for admitting the patient to the maternity ward.

A 6% difference, this time in favour of Hospital B was found for having done a *reassessment*. This seems to indicate that in Hospital B, registered nurses or midwives were responsible for the twice daily reassessment.

Legal medical prescription and doctors progress notes:

Identical and good scores were achieved for both hospitals.

Nursing care programme:

In line with the differences found between the two hospitals with regard to *Patient assessment,* Hospital A's performance related to the two critical criteria in this section, namely *critical care indicators prioritised in patient care plan* and *nursing care executed in line with priorities* was better than that of Hospital B with a 17% difference in both standard and critical scores for the first one and a 14% in standard scores and 15% in critical scores for the second one. However, both hospitals scored poorly for these sub-elements, especially the second – *nursing care executed in line with priorities*.

The relatively small differences in the overall score for this element (8% standard and 7% critical) were due to the fact that Hospital B achieved much higher scores for *patient education* and *patient information* than Hospital A. It is important to note that scoring for patient information depended on ticking of blocks and no real reporting while scoring for patient education depended on recording of actual education that was given to the patient.

Progress monitoring:

For the two critical criteria, namely, *nursing care evaluated* and *nursing care plan updated* where needed, Hospital A's scores, both standard and critical were higher than Hospital B's scores. For the first sub-element, the difference between the standard scores was 22% and for the critical score, 28% while for the second sub-element, the difference between the standard score was 3% and the critical score 5%. The relatively small difference can be explained by the fact that at both hospitals the nursing care plan, while not written out in a formal manner was contained within the progress report. For example, if a patient complained of constipation, the complaint would be recorded in the progress report, the action 'planned' and a record of the action having been implemented would be made.

Surprisingly Hospital A's scores, standard and critical of 75% for updating the nursing care plan were 75%, much lower than Hospital B's which were 100%. The same applied to the following sub-element – *updating of the prescription and recording of the execution thereof*, for which Hospital A achieved a score of 50% while Hospital B scored 100%. The researcher could find no plausible explanation for this anomaly.

Both hospitals scored 100% for both standard and critical scores for the final element – effect of medication / treatment monitored and recorded. However, as discussed, indications were that each time the patient received medication, even if it was the same medication time after time, the record would show that the effects of the medication were explained to the patient.

Infection prevention and 'Best Care Always'

Both hospitals achieved a 100% score for this element.

Safe patient environment and immediate ward environment

Both hospitals achieved high scores with a difference of only 3% between the two – Hospital B having achieved the higher score.

Legal compliance:

Since there were no critical criteria in this section, standard and critical scores were equal for each hospital. An overall score of 92% was achieved by Hospital A and 88% by Hospital B – a 4% difference.

The nurses in Hospital A tended to write more legibly than those in Hospital B resulting in a 7% difference.

Hospital A had a 3% advantage over Hospital B with regards to accuracy of the recording of dates and times.

Hospital B had a 3% advantage over Hospital A with regards the use of authorised abbreviations while Hospital A had a 7% advantage over Hospital B with regards to accompanying signatures and ranks when entries were made in reports and on documents.

Case management

This element was not applicable in any of the files audited for both hospitals. This was because patients admitted at the time the audit was done, did not require any changes to authorisation from their medical funders.

Nursing responsibility for accurate charting

Hospital B enjoyed a 4% lead on both standard and critical scores for this section, mainly because in 100% of cases the final diagnosis was correctly recorded while in Hospital B a score of 89% was achieved for this sub-element. This could have been due to a number of factors such as delegating the paperwork for discharge to a junior category of nurse, inaccurate recording by a doctor, absence of the ward secretary who would possibly detect an inaccurate diagnosis before sending the file for final billing (because of the fairly common diagnoses in a maternity ward and because specific consumables and equipment are associated with particular diagnoses, ward secretaries are quite efficient at identifying a diagnosis that does not seem to be correct, in which case they raise a query with the nurses).

Hospital A scored 96% for *charting of stock* while Hospital B scored 100% and for the third critical factor, *communication of patient movement within one hour*, Hospital A scored 96%. The lower scores in Hospital A could be attributed to the fact that the nurse did not chart the stock used and that this was not detected by the ward secretary before the file was sent for final billing.

4.3.4 Consolidated audit results of the two hospitals

Table 4.2: Combined audit scores for hospital A and hospital B

		Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
1	PATIENT ASSESS-MENT	334	321	452	169	3	446	75%	72%
1.1	Baseline assessment data established on admission	74	74	114	57	1	112	66%	66%
1.2	Critical indicators for care identified	161	148	228	57	0	228	71%	65%
1.3	Re-assessment done	99	99	110	55	2	106	93%	93%
2	LEGAL, MEDICAL PRES-CRIPTION & DRS PRO-GRESS NOTES	206	206	342	171	66	210	98%	98%
2.1	Medication recorded by Dr/RN on prescription chart according to legal requirement	101	101	114	57	6	102	99%	99%
2.2	Medication correctly administered according to Dr's prescription	99	99	114	57	6	102	97%	97%
2.3	Multi-disciplinary clinical progress notes recorded	6	6	114	57	54	6	100%	100%
3	NURSING CARE PRO-GRAMME	366	316	684	228	9	666	55%	47%

		Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
3.1	Critical indicators prioritised in patient care plan	157	148	228	57	0	228	69%	65%
3.2	Nursing care executed in line with priorities - actioned and recorded	57	16	228	57	0	228	25%	7%
3.3	Patient education given and recorded	64	64	114	57	5	104	62%	62%
3.4	Patient information given and recorded	88	88	114	57	4	106	83%	83%
4	PRO-GRESS MONITOR-ING	444	425	798	285	119	560	79%	76%
4.1	Nursing care evaluated (critical care indicators as well as progress)	165	152	228	57	0	228	72%	67%
4.2	Nursing care plan updated where needed	178	172	228	57	0	228	78%	75%
4.3	Appropriate referrals recorded	5	5	114	57	54	6	83%	83%
4.4	Medical prescription updated, executed and recorded	8	8	114	57	52	10	80%	80%
4.5	Effect of medication / treatment monitored and recorded	88	88	114	57	13	88	100%	100%
5	INFECTION PREVEN-TION AND	138	138	228	114	45	138	100%	100%

		Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
	'BEST CARE ALWAYS'								
5.1	Risk factors identified and recorded	74	74	114	57	20	74	100%	100%
5.2	Appropriate action for identified risks taken and recorded	64	64	114	57	25	64	100%	100%

		Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
6	SAFE PATIENT ENVIRON-MENT & IMMEDIATE WARD ENVIRON-MENT	296	296	342	114	21	300	99%	99%
6.1	Risk factors identified and recorded	224	224	228	57	0	228	98%	98%
6.2	Preventative measures taken and recorded	72	72	114	57	21	72	100%	100%
7	LEGAL COM-PLIANCE	401	401	456	228	5	446	90%	90%
7.1	Legible handwriting	101	101	114	57	1	112	90%	90%
7.2	Correct dates and times	94	94	114	57	2	110	85%	85%
7.3	Only authorised abbreviation used	107	107	114	57	1	112	96%	96%
7.4	Signature, qualification	99	99	114	57	1	112	88%	88%
8	CASE MANAGE-MENT	0	0	684	342	342	0	No score	No score
8.1	Case manager visit recorded	0	0	114	57	57	0	No score	No score

		Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
	when expected patient outcomes not reached								
8.2	Appropriate referrals recorded	0	0	114	57	57	0	No score	No score
8.3	Correct authorisation for level of care	0	0	114	57	57	0	No score	No score
8.4	Authorisation for second procedure obtained	0	0	114	57	57	0	No score	No score
8.5	Motivation for use of specialisation units obtained	0	0	114	57	57	0	No score	No score
8.6	Patient isolation motivation obtained	0	0	114	57	57	0	No score	No score
9	NURSING RESPONSI-BILITY FOR ACCURATE CHARTING	845	845	1140			868	97%	97%
9.1	Final diagnosis correct	216	216	228	57	0	228	95%	95%
9.2	Co-morbidities identified and documented	0	0	114	57	56	2	0%	0%
9.3	Ward equipment charged	60	60	114	57	27	60	100%	100%
9.4	Correct charting of all stock used	224	224	228	57	0	228	98%	98%
9.5	Credits of medication correctly done on discharge	16	16	114	57	49	16	100%	100%

		Simple Total	Critical Total	Full Total	Simple Count	N/A Count	Possible Total	Standard Score	Critical Score
9.6	Signed discharge or transfer date and times by the doctors / nurse	105	105	114	57	4	106	99%	99%
9.7	Clear evidence that discharge has been communicated & actioned to relevant reception within 1 hour of movement of patients	224	224	228	57	0	228	98%	98%
	Complete score	3030	2948	5126	1651	610	3634	83%	81%

4.3.5 Comparison between audit results obtained by the hospital staff and the researcher

Table 4.3: Below shows the comparison between the audit results of the hospital team and the researcher.

	Total CPA Score	**Patient Assessment**	**Legal Medical Prescription**	**Nurse Care Programme**	**Progress Monitoring**	**Infection Control**	**Safe Environment**	**Legal Compliance**	**Case Management**	**Nursing Responsibility**
Hospital	94%	94%	97%	84%	98%	96%	94%	93%	-	97%
Researcher	84%	74%	100%	60%	83%	98%	97%	92%	-	96%
Difference	10%	20%	3%	24%	15%	2%	3%	1%		1%

It will be seen that there was an overall difference of 10% between the findings of the hospital team and the researcher. The hospital team provided higher compliance scores than the researcher despite using the same tool to conduct the audit. The differences were particularly noticeable in the three aspects of the audit that related to nursing

functions, namely, patient assessment (a 20% difference), the development of the nursing care programme (a 24% difference) and progress monitoring (a 15% difference). The one nursing responsibility where only a small difference (1%) was found, related to nursing responsibility for legal compliance. The remaining aspects which, arguably, are shared responsibilities between the health care team, all had small differences ranging from 1 to 3%.

In three sections, the researcher gave higher scores than the hospital auditors, although there was only between 1 and 3% difference. In the case of the six sections where the researcher had lower scores, four of them differed greatly (between 10 and 24%) and the remaining two differed only by 1% each.

An in-depth analysis of each of the elements and sub-elements has been discussed. The percentages referred to in the discussion are those reflected in Table 4.4. – Combined audit scores for Hospital A and Hospital B. All the scores discussed are the scores obtained after files were audited by the researcher. Rationale for the differences between the researcher's scores and those obtained by the hospitals (Table 4.5) will be discussed.

Patient assessment:

- Baseline assessment data established on admission

The document used to record a *patient assessment on admission* requires a nurse to place a tick (✓) in the box providing an indication of the patient's medical history as well as a family history which may impact on the patient's reason for admission. The patient is questioned and if she answers in the affirmative, detail of the history must be recorded. While the ticks were mostly found to be in place, the detail of the history was seldom provided even if quite pertinent to the patient's admission. Using the example found in one file, a patient informed that she was on treatment for depression. Neither the history of how long she had been on treatment, nor the treatment she was on, was provided. This information would have been important if the patient had shown signs of depression post delivery. Although a surgical history was frequently recorded, the space for recording the year of surgery was left blank, making the information more or less irrelevant.

- Critical indicators for care identified

The critical indicators for care were most often recorded as ‘pain, temperature, pulse, respiration, emotional support’. Simply because these words were recorded on the document, the hospital audit committee would award a score for compliance while in the researcher’s view, these words reflected routine nursing care for a patient in the maternity ward and did not provide information that characterised the uniqueness of each patient. For example, one would expect in a maternity ward, some differences in patient education needs between first time and second or third time mothers. Differences in the needs between mothers who had undergone Caesarean Sections and those who had enjoyed normal deliveries would have been expected. Mothers who were breastfeeding and those who were formula feeding would have needed differing nursing interventions.

The standard score obtained for this sub-element was 71% and the critical score – 65%.

- Reassessment done

Both day and night staff are required to perform a comprehensive patient assessment at least once in the day and once at night. In almost all instances, the assessment done at night provided exactly the same information as the assessment done in the day when some differences would be expected, for example – one of the activities of daily living includes a question about diet – in most cases, the patients were on a normal diet. Although no meals are provided at night, the space for ‘normal diet’ would be ticked by the night staff.

A standard and a critical score of 93% was achieved although it was difficult to differentiate between the assessments done by day and night staff.

Legal medical prescription:

- Medication recorded by Dr / RN on prescription chart according to legal requirements

The legal medical prescription relates to the prescription by the medical practitioner and the compliance by nurses to the organisation's policy regarding telephonic prescriptions. Prescriptions for patients in the maternity ward were relatively uncomplicated and consisted mostly of prescriptions for Schedule 6 and Specified Schedule 5 drugs to be administered during labour and post operatively, drugs for induction of labour and medication for cessation of lactation. Some patients were administered antibiotics.

Nurses complied to the requirements for accepting telephonic prescriptions. Doctors complied to the legal requirements for writing out prescriptions.

There was no difference between the standard and critical scores of 99%.

- Medication correctly administered according to Dr's prescription

Because prescriptions in a maternity ward are commonly uncomplicated and almost follow a 'routine' regime, compliance is usually good to this sub-element.

There was no difference between the standard and the critical scores of 97%.

- Multi-disciplinary clinical progress notes recorded

Records reflect that nurses were diligent in recording prescriptions, instructions and requests from the multi-disciplinary team. Several members of the multi disciplinary team used the document to record their own notes.

A score of 100% was achieved for this sub-element.

Nurse care programme:

- Critical indicators prioritised in patient care plan

The researcher's views on critical indicators have already been discussed. However, to clarify the differences between the scores obtained by the researcher versus those

obtained by the hospital committee, if for example, health education had been recorded as a critical indicator, it would have been ticked in the *Patient Assessment Section* on the document under the heading of 'Health Education'. The care plan should have briefly detailed the nature and extent of the education required and the means of evaluating the patient's response. Instead, the document provided a tick (✓) box in which a number of topics for health education were listed – the person giving the education was required to tick the relevant topic indicating that health education had been given, and attach his / her initial alongside the tick. If this was done, the hospital audit committee would mark the sub-element as being compliant. Although the researcher found ticks had been placed in the box, she did not deem it to be a 'care plan', found very little evidence in the progress report of the nature and extent of the education given and in no single instance found a record of the patient's understanding or response to the health education. The box also required the nurse to provide the patient with a *Post Natal Information Booklet* and when enquiring about this booklet, the researcher was informed that it was no longer available.

A standard score of 69% and a critical score of 65% was achieved for the sub-element.

- Nursing care executed in line with priorities – actioned and recorded

Problems / needs identified on assessment should have been recorded in a column reserved for this purpose. It was seldom found however, that 'problems' identified on assessment were carried through to a nursing care plan. In the researcher's view, records showed no indication of insightful decisions on what should be included in a care plan, did not consider the real issues being experienced by the patient and therefore did not produce evidence of quality nursing care even if it had been provided.

The standard and critical scores for the sub-element were 25% and 7% respectively.

- Patient education given and recorded

The researcher found few instances where the education given to a patient was recorded. In most cases the records did indicate that the patient was advised of side effects of medication and if this was recorded, the audit committee would award a score for

compliance. However, the researcher found that even if the same medication was given several times, each time the record showed that the patient was advised / educated on the side effects. The entry was almost identical in each patient file, and would read something like 'Perfalgan given – side effects explained'. The impression created was that it was almost a 'rote' type entry similar to the 'breathing on room air' type entry. For this reason, files audited by the researcher obtained scores much lower than the target of 85% – a standard and a critical score of 62%.

- Patient information given and recorded

The element 'patient information given and recorded' usually achieved a score for compliance. It referred to information regarding matters such as visiting time, chaplain visits, and ward orientation. Evidence of this information having been given was accomplished with presence of a tick (✓) in the appropriate block on the front page of the document used in the facility. The researcher's findings were similar to those found by the audit committee – a standard and a critical score of 83%.

Progress monitoring:

- Nursing care evaluated (critical care indicators, as well as progress)

Nurses were expected to evaluate and report on the patient's progress with specific reference to the critical care indicators that were identified. Since few critical care indicators were identified, the researcher had difficulty in deciding on scores for this element. The audit committee, however, opined that if pain was regarded as a critical care indicator (which in some instances it may have been, for example, post operatively or during labour) but in most instances was post partum discomfort, and analgesia was given and recorded, a score for compliance should be awarded.

Although critical indicators were not necessarily recorded as such, most progress reports did contain evidence of care related to critical indicators for care. An example refers to the patient who was admitted for monitoring of foetal well being. Four hourly CTGs were done and the results recorded, the results shown on the *Foetal Movement Chart* were commented on in the progress report and the information relayed to the patient's doctor

was recorded. Notably, while emotional support was in almost all instances recorded as a critical indicator for care, there was no single instance of a recording of the nature and extent of emotional support having been given. On occasion, the report would simply indicate that emotional support was given without stating a reason for need for emotional support or the patient's response to the support that was given.

Scores obtained for the sub-element 'Nursing care evaluated (critical care indicators as well as progress)' were 72% and 67% for standard and critical respectively.

- Nursing care plan updated where needed

There was very little evidence of formal record of an updated plan. When the patient's doctor visited, the visit would be recorded and the record would indicate that either a new or no new prescription was given. Or the record would state 'continue with routine care'. It was common to find that any new intervention was recorded, for example if intravenous therapy was commenced, it would be recorded in the progress report; but no formal plan.

A standard score of 78% and a critical score of 75% was obtained.

- Appropriate referrals recorded

The element related to referrals resulted in similar scores between the audit committee and the researcher. In most instances, there was clear evidence that referrals were recorded. Both a standard and a critical score of 83% was achieved.

- Medical prescription updated, executed and recorded

Updating of the medical prescription, its execution and recording thereof in most instances was clearly evident – findings between researcher and hospital audit committee similar. A standard and a critical score of 80% was achieved.

- Effect of medication / treatment monitored and recorded

A 100% compliance to the sub-element was achieved.

Infection prevention and 'Best Care Always':

The document used by the facility contains a box for ticking and / or recording an entry for a number of risk factors for infection and if present requiring a specific intervention, for example, if a urinary catheter was in situ, it would require the nurse to enter the number of days it had been in situ so that it could be renewed when dictated by the organisation's infection prevention policies and procedures. This box was in all instances diligently completed resulting in a high score of 100% for compliance.

Safe patient environment and immediate ward environment:

Similar to the infection prevention box, the document contained a box for ticking after checking various risk factors to ensure that the environment was safe. For example, oxygen outlets are checked to ensure that they are functional and that all the connections are available, call bells are functional and bed tables are within reach. These checks occur on a daily basis and were recorded in almost all instances resulting in a score of 99%.

Legal compliance:

While there was only a 1% difference in the overall score achieved by the researcher and the audit committees for this element, the two scores of concern were those achieved for *legibility of handwriting* and the *accuracy with which dates and times were recorded* – 90% and 85% respectively. The researcher is of the view that both of these sub-elements should be considered as critical indicators. Neither the importance of being able to read a nursing entry nor the importance of accurate dates and times can be over-emphasised especially when an adverse event is under investigation.

Case management:

The section on case management was routinely not completed. It was therefore not possible to audit the results as nothing was recorded. This was probably due to the fact that patients were either private (self funding) and intervention by a case manager was not required, or none of the patients whose files were audited, required any intervention

for which additional authorisation would have been necessary. In the event of a baby having to be transferred to Neonatal Intensive Care, a separate file would have been opened for the baby and the case manager's visit would have been recorded in that file.

Nursing responsibility for accurate charting:

A 97% overall score was achieved for this element. This reflects the nurses' understanding of the importance of recording information related to billing and coding – important aspects when final bills are sent to medical funders. If billing is incorrect or if there are queries from the funders, payment may be delayed impacting on the organisation's debtors' days. Notwithstanding their importance, the researcher is of the view that inclusion of this element in a nursing documentation audit should be closely linked to the quality of care provided if the intention of the audit is to measure quality nursing care, that is, the link between nursing care and value for money should be indisputable.

In addition, the researcher is of the view that certain of the sub-elements fall into the sphere of responsibility for other members of the multi-disciplinary team. An example of this is the recording of the final diagnosis. It is the doctor's responsibility to make a medical diagnosis and he / she should record such diagnosis. The diagnosis is important for coding purposes and impacts on final billing. The question arises as to who should be held responsible for incorrect coding if the final diagnosis is incorrectly recorded?

Scores for this particular element with all its sub-elements are enhanced by the fact that in the facilities in which the study was undertaken, ward secretaries do a final check of patient files before they are dispatched for final billing and nurses are recalled to complete records if an aspect related to accuracy of charting is identified.

4.4 QUALITATIVE FINDINGS OF THE RECORD RESULTS

During the auditing process, the researcher took field notes of her findings. She then used latent content analysis to analyse the data gathered during this process. Latent content

analysis starts with identifying words or content in the field notes with the purpose of understanding the contextual use of the words or content and proceeds to interpret the content (Hsieh & Shannon, 2005). Two themes were identified viz. unnecessary reporting and lack of critical thinking. Each of these themes had three categories as shown in table 4.6. below:

Table 4.4: Themes and categories which emerged after completion of clinical practice audit.

Theme	Category
Unnecessary reporting	Irrelevant information
	Duplication
	Recording for the purpose of audit compliance
Lack of critical thinking	Poor insight into priorities for care
	Poor clinical judgement
	Robotic recording

4.4.1 Unnecessary reporting

For the purposes of this study, **unnecessary reporting** refers to records that are unrelated to the patient's condition and identified healthcare problems or needs, to records that are unnecessarily transcribed from one document to another and to records which are written simply because of audit expectations.

Evidence of **irrelevant information** was seen in most of the patient documentation under review. Although the majority of patients in the maternity ward are mobile even after having had Caesarean Sections, nurses still found it necessary to complete a daily assessment using an adapted *Waterlow Pressure Area Risk Assessment.* The few patients who were confined to bed because of the possibility of premature labour, were young, apparently healthy women with no co-morbidities and were probably quite mobile even while in bed.

The documents under review produced a number of examples of **duplication**, the most common one being the recording of blood pressure, temperature, pulse and respiration (vital signs) on a document entitled *Vital Signs Chart* and then recording exactly the same information on a document entitled *Progress Report*, even when in all cases reviewed, the vital signs were within normal limits. The daily progress report usually commenced with a handover report from night staff. Almost without exception, the initial entry would be identical from patient to patient and note that the patient was breathing on room air and that she had reported having had a good night. In a report produced by the Nurses Service Organization (2008), one of the "Top 10 Rules of Good Documentation" is the injunction against using generalised phrases such as "the patient had a good day". Not a single patient whose file was reviewed by the researcher had a respiratory problem and in any event, the observation that she was breathing on room air was recorded on a separate document entitled *Vital Signs Chart*.

Recording for the purpose of audit compliance refers to a report which is written to ensure that points are not lost when patient documents are audited. For example, the audit tool used in the facilities in which this study was conducted, required a score for whether or not the patient was given information regarding the medicine that she was administered. Many of the patients were administered analgesics during or after labour or a Caesarean Section. Each time an analgesic was given, it was recorded in the patient notes, followed by the words "side effects explained to the patient" even if the patient had had the same medication several times. On enquiry as to why an explanation had to be given to the patient with every administration, the researcher was informed that it had to be written if the ward was to achieve its audit compliance scores.

4.4.2 Lack of critical thinking

While there are many definitions and views on the meaning of **critical thinking**, for the purposes of this study, the definition by Dictionary.com which defines critical thinking as the "objective analysis and evaluation of an issue in order to form a judgement" will be used. The expectation is that the registered nurse or midwife adopts a critical approach to the assessment in order to base decisions for nursing interventions on the specific needs identified for that patient.

In the context of this study, **priorities for patient care** were seen as the specific and unique health needs or problems for individual patients. The nursing notes on the document used to record a daily nursing care plan and progress report, produced little or no evidence that any critical thought went into identifying or diagnosing a patient's specific needs. In the section on the document reserved for recording priorities for care, one word entries such as "vital signs, pain control, breastfeeding" were recorded and were identical for almost all patients. The researcher considered these "priorities" to be basic requirements for routine nursing care and not the real issues facing individual patients in a maternity ward. However, if these words were recorded, the record scored a compliance rating for the criteria "critical indicators for care identified" and "critical indicators prioritised in patient care plan".

Although audits done by hospital audit teams produced "good" results, the researcher found the records to be superficial and frequently irrelevant. Few records produced enough information for the researcher to really know and understand each patient's individual needs. For example, although a baseline assessment had been recorded (one of the questions on the audit tool is, "Was a baseline assessment data established on admission", the assessment was **not insightful or critical**. Although there was evidence that a progress report had been written (also an audit tool requirement), it was not necessarily aligned to problems or needs found on assessment and was very general.

In more than one instance, while it was reported that the patient had a good night, later on in the nursing notes, there would be a comment on how the patient reported to the day staff that she had hardly slept in the night!

Nurses seem to have difficulty in distinguishing between progress related to patient problems which are resolving (or not) following specific and planned interventions, and routine patient care provided to every single patient in the unit. This example relates to the category of recording for the purpose of audit compliance. If the observations are not recorded in the progress report, auditors tend to mark the report as being non-compliant

instead of reviewing all the documents in the patient's file to look for compliance to this requirement.

For the purposes of this study, **clinical judgement** refers to decisions on nursing interventions for a specific patient based on the findings on assessment of that patient. In an article authored by Montserrat *et al.,* (2018), critical thinking was described as the ability to make sound clinical judgments emanating from critical thinking.

When the patient is discharged, the document requires the nurse to comment on specific aspects, one of them being "Emotional State". Lack of clinical judgement was reflected in the "one word" and simplistic responses by nurses such as "alert, sleepy, happy". The researcher was of the opinion that nurses' understanding of what to record in this section of the document was lacking. The same opinion was held regarding the section of the document reserved for "Health Education". In this section, there was a list of topics according to which health education had to be given. One example was "Rest" and alongside this word, the nurse had written "have eight hours sleep every night".

The document used by the nurses was designed to prompt responses to assessment criteria based on activities of daily living. Nurses were required to place a tick (✓) alongside the need being assessed and were then expected to carry that need through to a section of the document where a plan to address the need would be recorded. However, apart from the fact that the need was seldom carried through to a nursing care plan, the "assessment" appeared to have become a tick list requiring **"robotic" type action** without attaching much meaning to the criteria that were ticked. An example of this was seen in an assessment of a patient whose baby had been delivered prematurely and was transferred to the Neonatal Intensive Care Unit. According to her history, the same patient had lost a baby the previous year. Although the block for "emotional support" was ticked, there was no evidence in the patient report of how emotional support would be given, whether it was in fact given and what the patient's response had been. During the time of the mother's admission in the ward, neither the baby's condition, nor the mother's response to her baby's condition was recorded.

Extending the concept of robotic action, it seemed that night staff simply copied the "assessment" done by day staff because in very few cases was there any difference in the assessment done by them.

4.5 DISCUSSION OF FINDINGS

In a study done by Coskun *et al.,* (2017) they stated that individualised care can only be given if the nurse knows the patient very well – by this they meant that a thorough objective *assessment* has been done and that *planning nursing interventions* will be based on this assessment. In the researcher's view, this particular aspect of nursing care was lacking as demonstrated by the poor results for identification of *critical indicators for care*, and influenced the results achieved for other elements such as those related to the care plan and reporting of progress.

The Scope of Practice of Registered Midwife (Regulation 2598, South Africa 1984, Chapter 3, Paragraph 3 (a) (b) (c) (d)), requires a midwife to diagnose a health need and to prescribe and implement a midwifery regimen that will address the need. The patient's response (both mother and baby) to interventions must be monitored. There was no clear evidence of application of this Regulation as demonstrated by the results achieved for the nursing care programme and progress monitoring. Scruth (2014), believes that nursing documentation audits must confirm nurses' knowledge and application of relevant legislation, a view shared by Singh & Mathuray (2018), when, in their research, they found "…… relevant legal knowledge and an understanding and application of the law is a key element for safe and competent professional practice".

The standardised audit tool used in the facilities is not only used in the maternity ward but is generalised to accommodate audits in all disciplines. No consideration in the design of the tool was given to the assessment specifically related to the progress of labour. It can be argued that the elements requiring measurements of initial / baseline and subsequent assessments can be marked as compliant if a properly completed partogram (Guidelines for Maternity Care in South Africa, 2015) was present in the files for those patients who

had been in labour. According to Nandaprakash and Hakuntala (2015), criteria for measuring quality care must be valid. An audit tool using feasible and reliable indicators to measure quality care in a maternity unit exclusively should be considered.

Irrelevance was a frequent feature found in the audits. Instead of reporting on real issues being faced by the patient and her carers, reports were of a generalised nature which did not allow the attachment of a particular file to a particular patient – if not for the demographic information on a file, the file could have belonged to any patient in the ward. The United Kingdom Nursing and Midwifery Council (2010) list one of the functions of good record keeping as being their ability to show how decisions related to patient care were made. Unless records are relevant and individualised, this particular function will not be realised. In their description of how records should be written, Beach and Oates (2014) opine that discussion "must be relevant to the patient".

It went without saying that certain elements measured in the existing audit tool would result in very high compliance scores. The two that immediately come to mind are those related to the measurement of infection prevention and safe patient environment. Although they are both important aspects of quality patient care, the measurement for safe patient environment was not directly related to nursing care. As long as the relevant boxes were ticked, regardless of by whom, the element was marked as compliant. The items in the box were general rather than specific to a maternity ward. Consideration should be given to relevant safety checks such as baby identification, labelling of expressed breast milk and the like.

The box reflecting compliance to the sub-elements for infection prevention was related to nursing care but could have been more specific to infection prevention in a maternity ward. For example, it is highly unlikely that a patient in a maternity ward would have an underwater drain or a central line in situ. Consideration should be given to the inclusion of risk factors specific to a maternity ward such as premature rupture of membranes.

While it may be important for the organisation to measure case management, it is not directly related to nursing care. The relatedness that should be considered is that of the nurse informing the Patient Services Department that a change in the level of care is required so that case managers can initiate the process for authorisation by medical funders. The rationale for relating it to quality of nursing care lies within the advocacy role of the nurse which, in the Scope of Practice for a Registered Midwife (Regulation 2598, South Africa 1984, Chapter 3, Paragraph 3 (u)) requires the midwife to act as an advocate that enables the patient to obtain the healthcare they need.

The existing audit tool provides for the measurement of the nurses' compliance to accurate charting of aspects related to billing and coding. According to Pertille *et al.,* (2018), quality of care rendered can be monitored through billing by comparing care in terms of value for money. Consideration should be given to the means with which this element is included in an audit tool to ensure that it is in fact related to quality nursing care and not to the healthcare facility's need to 'balance the books'.

Although nurses in the focus group were critical of the structure / design of the standardised documents used in the facilities, Scruth (2014) maintains that documents that are well structured, language that is used and understood by all users of the document and knowledge of how the documents should be used will provide meaningful and reliable information that will contribute to the continuity and quality of patient care. The audit tool being used by the healthcare facility in which the study was undertaken does include consideration of at least some of these factors. In the section on *Legal Compliance*, the use of abbreviations is audited, guidelines on the use of the documentation are freely available and the document is structured and standardised. Consideration should be given to reviewing the documents used to streamline their structure in order to facilitate reporting and to prevent unnecessary duplication of information. The use of ticks to provide evidence of care should be reviewed. A separate audit tool for monitoring elements that do not fall within the scope of nursing should be considered.

4.6 CONCLUSION

This chapter presented the findings of phase 1 of the study. Chapter 5 will elaborate on the findings of Phase 2 of the study.

CHAPTER 5 : FINDINGS AND DISCUSSION OF PHASE 2

FOCUS GROUPS

5.1 INTRODUCTION

This chapter will present a detailed description of the focus group discussions held in Phase 2 of the study. The purpose of this phase was to explore why nurses do not comply adequately with the audit requirements for recordkeeping. By determining the nurses' views on this it was hoped that valuable insights would be obtained regarding a better way of auditing the records.

5.2 FOCUS GROUP THEMES

Three themes were identified as shown in table 5.1. with seven sub-themes, each of which will be described below.

Table 5.1: Focus Group Themes

Theme	Sub-theme
Documentation	Structure
	Documentation rules
	Orientation to documentation
People	Work expectations
	Emotions
Systems	Online Administrative requirements
	Archiving and destruction of records

5.2.1 Documentation

In the context of the discussion with the focus groups, documentation refers to the booklets that are used to record the patient assessment, care plan, patient progress

report, nursing observations and other related information such as communication with and visits by members of the multi-disciplinary team. In addition to the booklets, separate documents are used for other purposes, for example a separate document is used to record periodic checks of an intravenous insertion site which is also considered as documentation for the purposes of the audit, and therefore included in this theme.

5.2.1.1 Structure

Participants expressed strong opinions about the fact that the documents in use were voluminous and poorly structured, resulting in poor flow of information from one section to another in the documents. Apart from the repetition caused by the many documents (some of the same information recorded in the mother's booklet is repeated in the baby's booklet), the associated act of turning from one page to find the other in the booklet/s was in itself frustrating. Participant B6 explained by saying "the state of the mother's breasts has to be described in one section of the booklet used for postnatal care while on the very back page of the same booklet, there is a tick list according to which the condition of the mother's breasts must be recorded". Participant B3 agreed when she said, "It takes time and it's double work, so you get frustrated but when (you) skip it, it is shown (in the documentation audit) as bad record keeping".

While repetition of recording was reiterated several times by all of the participants in both focus groups, the booklet used to record the care of the baby was also cited as being unnecessary and requiring nursing time that could or should have been spent with the patient. The general feeling was that babies who are not transferred to the Neonatal High Care or Intensive Care Units are well and that all that is required is to ensure that there is bonding between mother and baby, that the babies are feeding, sleeping and eliminating according to normal patterns and that they are showing no signs of complications. The participants (A1 – A5) agreed that these parameters could be recorded on a suitably designed chart and any unexpected event could be recorded in the mother's records. Instead, a full report has to be written each day on the baby. In addition, similar information is recorded in the mother's booklet, for example, "baby is latching well".

5.2.1.2 Documentation rules

The documentation rules are the guidelines developed by the same committee that developed the documentation. They constitute the guidelines on how to use the booklets and other documents. These rules and guidelines compound the frustration relating to the structure discussed above by decreeing that certain information be documented on more than one page in a document or more than one document. Participants criticised this requirement as being time-consuming explaining that time could have been better spent on patient care or records which were more pertinent but if not done, marks are lost during documentation audits and sanctions are imposed on the ward. In a strongly expressed opinion, Participant B4 stated, "In the mornings you actually have to see that chart, it's crazy. You take a whole half-an-hour just to do all the ticks, just so that you can go and rewrite everything", while confirmation came from Participant A2 when she said, " We repeat the very same things. You are going to record it in the progress chart that we have put [inaudible 0:02:40.1]. Then comes another form, 'special care form', where you write the very same thing that you have put up the IV infusion. You have commenced, and then another one. There are so many documents about one thing, by the time you are finished with one patient, you have written up on the very same thing several times, irrespective of you documenting it on the progress chart".

The requirements of what to write was also criticised by participants as evidenced in the following statement by Participant A6, "Yes, and they don't just want you to write down health education given. You must actually write down the information but if I have to write all the information that I give to the mum, my book is going to be full in the first hour. So you can't, so you just write 'health education given' but they actually want to know what education was given and what did you tell her, if you want it as proof".

Participants complained that rules also promote unnecessary reporting. An example of the requirement for daily assessment and recording of the risk for falling was cited

(Participants B1 – B7). This is a general rule that they felt may be applicable in medical and surgical wards but not in a maternity ward.

They also complained that rules appear to be inconsistent and, as an example, cited the pain score model that was used to measure pain. The conversation revolved around the feedback that was given to them after a retrospective audit had been done on documents in their ward and they had not done as well as expected. They attributed this to the fact that "someone" had changed the pain score model that was being used and nobody had informed them. A question posed by the interviewer, 'So what they say after an audit - does that differ with what you were actually instructed to do or is that part of the change?' sparked a debate which was summarised by Participant A4 as "Yes, they say, 'okay this is not working, so let's...' So we're doing this hopping thing and then the people that is here longer they don't know whether they're coming or going" and concluded by Participant A1 when she replied 'Yes, because the pain score wasn't such a big thing but then all of a sudden, about two months ago, it boomed like everybody must start using the pain score, out of four and it was like heavy'.

5.2.1.3 Orientation to documentation

All new staff and agency staff who work in the maternity wards in the healthcare facility in which this study was undertaken are formally oriented in the use of the patient documentation. Permanent staff acknowledge receiving orientation by attaching a signature to a specifically designated form which is then kept in the staff member's personal file. Despite being formally oriented, discussion by the focus group seemed to suggest that this did not prepare them adequately to use the documentation. This notion was expressed by Participant B4 who stated that when she first started working in the ward, she had to continuously go back to other nurses' records to understand what she was required to record on a particular document or in a specific space on a document. The other participants agreed with their colleague when B1 made the statement, "I agree with B4 – they don't spend enough training on what the expectation is and exactly what they want". Participants felt that orientation was a "once off" intervention and was not consolidated after induction was completed (Participants B1 –B6).

5.2.2 People

The groups felt that people with whom they interacted either directly or indirectly impacted on their capacity to complete their nursing records according to all the rules and audit requirements. By people, they meant doctors, patients and managers either in their own units or, more remotely, senior managers who made decisions about staffing levels in their units. Related to people is the concept 'flexibility' which in the context of the discussions refers to the practice of using core staffing levels and augmenting or even reducing the core, depending on ward activity levels.

5.2.2.1 Work expectations

There was agreement amongst the participants in the groups that the pressure they were under to complete their work was a factor in preventing good recordkeeping. They revealed that they frequently only get to write up their notes at the end of a shift when the nurses taking over the new shift come on duty. The reason cited for this practice, which they admitted was far from ideal, was a demanding workload where they sometimes have so many patients delegated to their care that as soon as they are finished seeing to the needs of one patient, the next patient requires their attention, limiting the time they have to record the care given to the first patient. One of the participants (A4), expressed this concern when she said, "I think in maternity especially, sometimes you are so busy in the morning and not even just sitting and writing. Even if you're sitting at your patient but then someone comes and calls you, then you have to go for a Caesar, so you actually have ten minutes to write and you have to get as much as possible into those ten minutes". Recording care at the end of a shift instead of when it is given results in a "watered down" record either because they do not remember all the facts or because they are in a hurry to leave the ward because of off duty commitments. The nurses coming onto the shift also expressed their frustration because they are unable to complete their assessments and plan care until they have the patient records in their hands (Participants A1 and B 4).

Nurses cited the concept of staffing flexibility, whereby staff are either re-deployed or sent home if the ward is not busy as one of the reasons for an increased workload, resulting

in poor record keeping. Unlike general wards where patient numbers can be reasonably predictable, in a maternity ward, while there is some scope for predicting numbers, patients do arrive unexpectedly. Also, unlike in general wards, the labouring patient requires constant attention often needing one on one nursing. If staff numbers have been downscaled, nurses who have been sent home either have to be recalled or agency staff must be recruited or, worst case scenario, they must simply add the additional patient to their existing workload. Participant A3 had this to say; "I can even head right now in maternity ward – we have got just two midwives. You can find one is in theatre and one remains, she has antenatals alone. She has two or three in labour and they don't see that. They see just the day that you don't have a patient but one day you can be, people come and now when you ask for help they don't give you help". Also related to workload was the fact that nurses who are not registered as midwives cannot assist with the labouring patient but are confined to working in the nursery and post-natal section of the ward. This places an additional burden on the registered midwives who are on duty and who are accountable for the quality of patient care including the record keeping.

Patient and doctor expectations was a frequent factor in preventing notes from being written contemporaneously. Nurses are often tasked with carrying out functions that should be carried out by the doctor or his / her office, for example, if a patient has to undergo an emergency Caesarean Section, the nurse finds herself making administrative arrangements for the operating theatre, finding an anaesthetist and contacting the case manager for authorisation. Instead, the nurse should be writing up the events leading to the emergency operation. It is usually the same nurse that prepares the patient for theatre, accompanies the patient to theatre and brings the baby back to the nursery. It is only after completion of all of these activities that he/ she is able to write up the patient notes. One nurse, Participant A4, expressed her frustration by stating "…….two hours later you come to the ward and then patients is (sic) unattended. You have to sort out your patients and by the time you're done sorting out your patients – where was there time for writing? It is unfortunately, the truth of the situation".

By the very nature of the fact that they have just given birth, patients are often very demanding either because of their emotional states or because they are new mothers who are struggling to cope with their new babies. Nurses expressed concern that many patients have not been well-educated in the antenatal period and are overwhelmed with the care required by their newborn babies. Participant A1 felt strongly about this, as can be perceived by her statement; “I think that is where also the problem is postnatal, there’s a problem. It’s not only the patient, the baby, but it is the breastfeeding. For nine months, the doctor sees the patient, for nine months. We see them for three days and all of a sudden we’ve got to produce miracles to get this baby on the breast. Perhaps there’s a problem with the breast and the nipples and then the babies don’t suck. Now the mothers are upset. We are under a lot of strain to get the mother to bond with the baby, to get the baby on the breast to suck and it’s not only one. Usually when we have a problem it comes in three’s, and it happens. The doctors see the mothers for nine months. They don’t say anything. They don’t prepare the mother and say look, you may have a problem, and you may have a problem with breastfeeding. They come in with this ideal picture of what they are going to do and then they are brought down to earth. That brings the postnatal blues and it just puts a lot of stress on us. In other words, we’ve got to... The doctors say, “Please help Mrs X.” Then this doctor says, “Please help Mrs Y.” Every time they ring the bell and say, “Please help me with breastfeeding.” Maybe they won’t even ask for help because they feel bad”.

Participants stated that they had to put their recordkeeping duties aside while attending to these mothers and felt guilty if for example, they counselled the mother while at the same time writing notes. In the words of Participant A2, “Then when the patient wants your attention and you have to help with the baby then your record keeping is lacking because you’d rather have patient care than the reports. So do you rather write your records that everything is up to date or do you spend time with the patient who actually needs your help? That takes a lot of time”. According to one of the other participants, recordkeeping had to take second place to patient needs and expressed this by saying, “This is a demanding unit. You can sit at any given

time for two hours with a patient, giving her emotional support, giving education, assisting with breastfeeding, and by the time you walk out of there you're exhausted but you have to go to the next patient and possibly go through the next hour talking. Then you have to come back, sit down, and write all that stuff..." (Participant A1) and finally by Participant A5, "For the whole day, you will be with that patient because she will just ring the bell every two minutes".

5.2.2.2 Emotions

Threaded through the group discussions were emotions expressed by the nurses. Frustration at the frequency of duplication that the documentation requires, anger at the fact that often nurses leave the ward long after their shifts have ended because of the need to complete their documentation, "It's killing us because every night we leave at 21:00", (Participant A1) and guilt at not spending enough quality time with their patients. One nurse expressed it as "nursing the document instead of the patient" (Participant B3). Participant B2 narrated her experience of settling into her bed for a well-deserved rest after a busy night when she suddenly remembered that she had not completed the hourly observations chart for checking the site for intravenous therapy. Her sleep was disturbed for the rest of the day and she reports that when she got back on duty that night, she was relieved to see that the patient still had intravenous therapy in situ and there was no sign of phlebitis so she filled in the form retrospectively.

Nurses were wary of the consequences of poor documentation and the spectre of facing disciplinary enquiries at the South African Nursing Council was mentioned several times during the discussion (Participants B1 – B6 and A1 – A7). Although not afraid, they were concerned about the penalties regarding negative audit findings, citing this as an important reason for complying to the many documentation requirements even if they regarded them as being unnecessary. One nurse expressed her concern when she said, "When it comes to record keeping, if you go to the Nursing Council, midwives are always in trouble. You know why? I will tell you, because it's the very same thing which we are discussing now", (Participant B2).

5.2.3 Systems

The systems referred to by the nurses were those that required capturing data which served as online communication to other departments and which was used for purposes of billing in relation to patient movement, for example from ante natal ward to operating theatre, charging of stock and patient admission and discharge.

5.2.3.1 On line administrative requirements

Nurses acknowledged the need for automation of systems but were critical about the role that nurses are expected to play in ensuring the success of a particular system in achieving improved outputs. Participant A1 expressed the views of all the participants when she said “Now we have the XYZ System, and we are beginning with the ABC System now. Okay, it’s all very well that it’s progress and everything but it’s not fail proof. It fails time and time again and then when it fails then the next couple of days there are Form Xs (forms the nurses are required to complete if they were not able to use the system, for example if the system was down). There are enquiries into why this wasn’t done or why wasn’t this patient and the baby discharged at the same time. In the meantime, it’s the XYZ System”.

They complained about the system used for billing which requires that the nurse who used an item that has to be charged, has to “click and search” on the system, saying that it takes up a lot of time due to factors such as a slow system, use of items that have not been pre-selected for a particular procedure and because the system is sometimes “down”. When the system is down, the nurse has to use a form to record the items used and then later has to capture them on the system. Nurses felt that the time spent on system requirements detracted from the time that they could be spending ensuring that their records are up to date and comprehensive.

5.2.3.2 Archiving and destruction of documents

Instead of archiving records in boxes as has been done in the past, patient records are now being scanned. Ward secretaries have a list of the documents which must be scanned and the order in which they need to filed. Nurses have observed that a number

of the documents they are required to use in terms of the document rules are not included in the file that is sent for scanning and that these documents are shredded. They gave examples of the documents / flow charts which were confirmed by the researcher. The information on these documents / flow charts is also recorded in the patient progress report. They expressed frustration at the fact that they were required to complete the charts with the explanation that the records on the charts would “protect” them in the event of patient or doctor complaints but that once the patient was discharged, these charts would no longer be available. They were of the opinion that the charts were redundant and their time-consuming completion could be better spent on patient care or completing more comprehensive records in the patient’s progress report. It was stated that they could not ignore the charts as these were scrutinised in the audit process and their absence would result in penalties (Participants B2,B3,B4).

The patient accommodation board also fell under the knife during the discussion (Participant B3). Nurses acknowledged that while the system works well, they are responsible for capturing patient movement information and when there are systems glitches which prevent capturing in real time, nurses have to go back later to capture data and also complete a form that has to be sent to the systems controller at the hospital. Nurses felt strongly that the time taken to perform these functions encroaches on nursing time, limiting the time available to spend with the patient or to write more comprehensive records.

5.3 DISCUSSION

The focus groups helped clarify the difficulties the midwives are having with the current documentation, which in turn reflects on their audit results which are used as a performance measure. It is therefore understandable that this is an emotive issue but their input was useful in providing guidance for the changes that are needed and will be discussed in this section.

Three booklets are used to record care in the maternity wards in which this study was undertaken; one for the antenatal patient who is not in labour, one for the

patient admitted in labour and one for the baby after delivery. The antenatal booklet may be relevant since use of a booklet which reports on the entire labour, delivery and post partum care of a patient would be uneconomical if used for the patient with an antenatal condition and whose labour is not imminent. However, the baby booklet does seem superfluous as almost all of the reporting in the booklet is also reported in the mother's booklet. Because the hospitals embrace a baby-friendly approach which includes rooming in, the babies are not separated from their mothers for lengthy periods and it would make sense to record all matters pertaining to the baby in the mother's booklet. Bonding between mother and baby should form part of an audit and a combined report may serve to promote evidence of interaction between the mother and the baby.

Scruth (2014) echoes the views already expressed by Geyer in 2005, that documents should be **well structured and logical**, allowing easy access to information recorded by the nurses. By the same token, nurses should not find it time-consuming to access the pages on which specific information must be recorded. While the documents used by the healthcare facility are designed to promote comprehensive reporting, their structure does lend to duplication and pages are not necessarily logically arranged to allow an easy flow of information.

The documents make use of ticks (✓) in certain sections; one of them being in the section that accommodates a patient assessment. The intention behind the decision to use ticks was to save time by eliminating the need to write out irrelevant information, for example, if the patient has no specific elimination needs, a tick is placed in a box alongside the word "Normal". In the researcher's opinion, this practice seems to have impacted on the nurses' responsibility for critically assessing their patients and analysing the information gained to identify real nursing and healthcare needs and to make sound and autonomous judgements on the planning of interventions for these needs. In a study conducted by Stewart *et al*., (2017), also critical of the use of ticks to signify nursing care in a palliative environment, the authors were satisfied with the conclusion that the project that

they had undertaken would ensure that documentation did not “become a ‘tick box’ exercise”. The use of ticks may also detract from the intention of providing important information that may be relevant to other members of the multi-disciplinary team, thereby impacting on the continuity of care intended by good record-keeping practices. A document review should include careful deliberation of when ticks would be useful and time-saving. They should be avoided for communicating pertinent information. An audit tool must not only enable the evaluation of whether care was provided but must also have the ability to evaluate the quality and comprehensiveness of the care which will prove difficult if indicated only by a tick. Valera *et al*., (2017) maintain that unless records present a full narrative, patient safety can be compromised through for example, failure to report on poor response to treatment.

The **documentation rules**, while well-intended in the sense that they were formulated to promote detailed information about patient assessment, interventions and response, also contribute to duplication; for example, the rules require that the ticks in a box on the document alongside topics for health education, be followed up in the progress report by a description of the health education given. This raises the question of the balance between too little and superfluous information. The researcher shares the view by Geyer (2005) when she pointed out that a nurse cares for several patients at any given time and if ever an account of the care provided is needed, records will be the only reliable source, especially if needed months or even years after the patient was discharged from the healthcare facility. The distinction between brevity versus lack of information should be incorporated into recordkeeping rules. Records should be “succinct” (Scruth, 2014) and contain only necessary information. Nurses need to discriminate between necessary information and overload, that is, excessive narration but, as exhorted by Griffiths (2016) “records must be sufficiently detailed to provide evidence that a nurse has discharged his / her duty to take care”. Consideration should be given to critical analysis of the information that should be reported in more than one document; if temperature, pulse and respiration are

absolutely normal and if totally unrelated to the patient's diagnosis, is it really necessary to record them both on a vital signs chart and in the patient's progress report? An audit tool must be accompanied by very clear rules on what should and should not be included in nursing records. Although there should be penalties (in the form of loss of score) for missing information, the discovery of superfluous, unnecessary and perhaps even duplicated information should be included in an audit report and used to give feedback and generate open discussion of record keeping practices by the nurses concerned. In this way, the audit will truly become a quality improvement initiative by making nurses more aware of the shortcomings in their records, the implications related to poor recordkeeping and how they impact on the quality of nursing care (Maia *et al*., 2017).

In their article written after completing an audit of the preparedness of Bloemfontein Primary Healthcare Clinics for emergencies, Hagemeister *et al*., (2018) stated that the practical questions that arose during the audit pointed to the fact that consistent audit rules are necessary to ensure consistent audit results. There was some indication of inconsistency of interpretation of audit and documentation rules applied by the audit committees seen in the differences between scores achieved by Hospital A and those achieved by Hospital B for certain sub-elements that were audited. Consideration should be given to having well-trained auditors (Reinstein, 2001; Bjorvell *et al*., 2000) who serve as permanent members on the audit committees for a specified period to promote consistency. New members should be oriented and trained to ensure continuity. This will not only facilitate consistency among the members of the audit committee in a particular hospital but will also allow fair exchange audits where an audit team from one hospital audits nursing records from another hospital to ensure objectivity of results.

While Scruth (2014) refers to using a standardised language Geyer (2005) refers to language that can be understood by all members of the multi-disciplinary team, reinforcing the concept of accessibility. In all files audited, English was used as

the medium of communication. However, it was common to find unacceptable abbreviations and even slang or jargon which according to Griffith (2015) and Scruth (2014) should be avoided. In the absence of a hospital policy regarding abbreviations, only universally accepted abbreviations should be permitted, that is, those taught in most healthcare professions, an example of which is 't.d.s' which at least all nurses and doctors understand to mean three time a day (Geyer, 2005; Selvi, 2017). Adherence to the principles of good recordkeeping will be evaluated throughout the nursing documentation. As already mentioned, evaluation will need to be accompanied by specific audit rules to ensure consistency; for example, how many "unauthorised" abbreviations will constitute a partial compliance and how many will constitute a "non-compliance"?

Separate documents which are seen as augmenting information already contained in the booklets used to record nursing care do constitute another source of unnecessary time consumption for nurses. However, incomplete entries in the records were sometimes backed up by entries on separate documents. For example, an intake and output chart which formed part of the booklet would be blank but the chart used for hourly checks of the intravenous site, as well as the charting/charging of the use of consumables (equipment used for inserting a drip, the vacolitre) went some way to provide proof that treatment was given as prescribed. In the researcher's experience, nurses tend to create documents that they feel "protect" them while in the researcher's views, if accurate and comprehensive notes are made in the patient's progress report, additional documents will not be needed for protection. Geyer (2005) opines that recording unnecessary information is time consuming and increases the workload.

Nurses expressed the opinion that demands on their time (**work expectations**) are huge and that these demands come from a number of sources including patients and doctors. The substantial time spent with the patient was not apparent in the records audited by the researcher, nor the time satisfying doctor's demands such as arranging for anaesthetists but, according to the nurses, impacted on the

time available to write their records. The researcher is of the view that by the nature of the discipline, patients in a maternity ward will require nurses to spend quality time with them and there should be some recorded evidence in the documentation. Complaints of not having seen a nurse for hours are not unheard of. While claims could not be verified by the researcher, they, together with the flexibility of staffing in the units, could account for the stereotypical records seen in the documents – records such as 'No complaints, breathing on room air, up and about' among others.

Audits should not be regarded as fault-finding sessions but should be followed by constructive discussions of all findings, both good and bad with all stakeholders. Good practices can be replicated and bad practices addressed. Maia *et al*., (2017) write about "reshaping" practices and taking corrective action and in so doing, promoting a quality service. An open and non-threatening climate for discussion must be created by managers in order for the real issues to come forward. Complaints such as unrealistic expectations should be addressed with relevant stakeholders. However, effective interventions to address issues should lead to improved record keeping practices and consequently, better audit results.

The claims by the nurses of time taken up in dealing with the demands of the **on line administrative systems** could not be verified in this study except to state that three of the seven sub-elements in the section of the audit tool which were related to on-line administrative systems were regarded as critical criteria even although they were only indirectly related to nursing care. Furthermore, compliance to this section of the tool was very high in both Hospital A and Hospital B which seems to support the nurses' views.

In most businesses, including the business of healthcare, increasing use of technology as means of communication, including the use electronic patient records, is becoming a way of life and nurses may need to improve their skills in this regard especially in light of the ever-increasing advent of electronic nursing

records (Chung *et al*., 2017). However, nurses should not be expected to perform administrative tasks that are unrelated to nursing, such as capturing data on stock utilisation and which contributes to the conflict they feel between meeting non-nursing administrative requirements and providing quality nursing care.

At the researcher's request, the files audited by the researcher had been kept back before being sent for final billing. In those files, additional documents referred to by the participants were found. Also contained in the file was a tick list of the documents that would be sent for scanning. The absence of the titles of some of the separate documents on the list confirmed the claim by the participants that certain of the documents they were required to complete, were not sent for **archiving** but were in fact **shredded**. In the case of each of these separate documents, the researcher could find no real purpose for their existence if the information they provided was written in the patient progress notes and in which many cases was in fact done.

Both expert groups agreed that aspects such as charging for stock and complying with administrative requirements for accurate billing should be included in an audit tool but should not hold a place of great importance. Information regarding charging is aligned with the Patients' Rights Charter (Department of Health:2007) which among other things states that the patient should be informed about costs involved for treatment and should have information about decisions made by health insurance / medical aid schemes on agreements for payment. Pertille *et al.,* (2018) maintain that comprehensive nursing records will provide evidence of diagnostic interventions, medications prescribed and other factors related to cost and in this way will link costs to the quality of the service provided. Since both the private and the public sector hospitals subscribe to a philosophy that places the patient at the centre of care, a serious review of non-nursing tasks should be undertaken and those that are considered purely administrative should be appropriately delegated.

5.4 CONCLUSION

In this chapter, the discussions held with the focus group revealed their reasons for the poor recordkeeping often encountered in the patient documents and provided insight into their attitudes towards and criticism against factors that prevented them from keeping good records. It emerged that constraints to complying to the criteria set by the audit tool were not confined to the audit tool itself but to the documentation used to record patient care.

In Chapter 6, the group discussion with the nominal group and the conclusions determined by the group on which the Delphi technique was applied will be presented.

CHAPTER 6 : FINDINGS AND DISCUSSION OF PHASES 3 AND 4

NOMINAL GROUP, DELPHI STUDY AND FOCUS GROUP WITH THEORETICAL EXPERTS

6.1 INTRODUCTION

This chapter will present a detailed analysis of the opinions expressed by applying the principles of the nominal group technique on an expert group of nurses convened to determine what should be measured in nursing records that would reflect the provision of quality nursing care in a maternity ward and therefore be the focus of an audit tool. Their opinions were consolidated and validated through the application of the principles of the Delphi Technique on a second group of expert nurses. A third group, a group of theoretical experts provided an opinion on the clinical utility of the proposed record audit tool.

6.2 EXPERT GROUP 1 - NOMINAL GROUP

In this section an overview of the data collected during the nominal group discussions is given first, followed by categorisation of the data.

After writing their ideas independently on the sticky notes provided, posting the sticky notes on the space provided and eliminating ideas that represented duplication, a discussion on the remaining ideas ensued. During the brainstorming session, concepts were clarified and reasoning behind ideas explained resulting in consensus that the elements listed in the table 6.1 should be considered for inclusion in an audit tool to measure the quality of nursing care in a maternity unit.

Table 6.1: Elements that should be measured in an audit tool to measure the quality of nursing care in a maternity unit

Elements
Physical antenatal examination
CTG – presence / strength of uterine contractions
Taking an obstetric history – past and current pregnancies
Taking a relevant medical and surgical history
Taking a relevant family history of female relatives
Baseline assessment on admission
Blood type
CTG – baseline foetal heart rate
Physiological parameters – mother and foetus – vital signs during labour
Progress of labour – stages, cervical effacement and dilatation
Partogram
Record of delivery
Assessment of the newborn
Physiological responses
Latching and feeding
Healing – caesarean section / perineum
Physiological responses – breasts, lochia, uterus
Baby care – immunisation
Measurement of patient satisfaction
Health education
Social / personal issues
Authenticity of recording
Visits, interventions, and administration of medicines and instructions by members of the multi- disciplinary team
Bonding, coping
Compliance to recordkeeping rules

In discussion with the nominal group, it was agreed that the entire spectrum of care during pregnancy, labour and the post-partum period should be covered in an audit tool to measure the quality of care in a maternity ward. It must be noted that this study was undertaken in a private healthcare facility where the majority of patients are admitted

when in labour. For the greater part of their pregnancies, patients receive antenatal care from their private medical practitioners. However, the intention in the design of the tool will be to permit assessment of the quality of nursing care in a maternity ward, regardless of whether the patient is treated in a public or a private facility.

The nominal group held the strong conviction that the tool should provide evidence that all nursing interventions are based on clinical judgement, that there is evidence of interpersonal aspects of care, that is, interaction between the nursing staff and the mother and baby, interaction between the nursing staff and other members of the multi-disciplinary team and interaction between the mother and the baby.

The group was unanimous in their opinion that evaluation would not be complete without measuring compliance to the principles of good recordkeeping and finally, that the audit tool should be uncomplicated and easy to use, thereby promoting and encouraging frequent monitoring followed by appropriate action.

The group's expertise was used to categorise the elements on which they had agreed. The construction of the Delphi tool was based on these elements and their categorisation which is reflected in Table 6.2.

Table 6.2: Expert group themes

Category	Element	Theme
Antenatal - Maternal	Physical ante natal examination	**Clinical Judgement – Assessment, Interpretation and Intervention.**
	CTG – presence / strength of uterine contractions	
	Taking an obstetric history – past and current pregnancies	
	Taking a relevant medical and surgical history	
	Taking a relevant family history of female relatives	
	Baseline assessment on admission	
	Blood type	
	CTG – baseline foetal heart rate	

Category	Element	Theme
Antenatal - Foetal	Monitoring of foetal well-being	
Intra-partum	Physiological parameters – mother and foetus – vital signs during labour	
	Progress of labour Stages Cervical dilatation	
	Partogram	
	Record of delivery	
Newborn	Assessment of the newborn	
	Physiological responses	
	Latching and feeding	
Post Partum - Mother	Healing – caesarean section / perineum	
	Physiological responses – breasts, lochia, uterus	
Post Partum - Baby	Baby care – immunisation	
Interaction between nursing staff and mother	Measurement of patient satisfaction	**Inter personal aspects of care**
	Emotional status	
	Health education	
	Social / personal issues	
	Authenticity of recording	
Interaction between nursing staff and other healthcare professionals	Visits	
	Interventions	
	Medical and other treatments	
	Medication administration and response	
Interaction between mother and baby	Bonding, coping	

Category	Element	Theme
Record keeping rules	Evidence of all interventions / actions	**Compliance**
	Legibility	
	Legality	
	Timeous	
	Biographical data	
Format	Keep it short and simple	**Audit tool**

6.2.1 Discussion

It seems that over the years, **clinical judgement** and critical thinking have been regarded as interchangeable concepts (Cazzelle & Anderson, 2016; Faccione, 2015). However, while the study done by Cazzelle and Anderson (2016) found that they were two separate concepts, they did overlap and in an unpublished paper by Profetto-Mcgrath and Myrick – 2003, cited in Cazelle and Anderson, the authors found that logical or clinical reasoning resulted in contextual action. In their abstract for the article they produced, Monsterrat *et al*., (2018) opine that the clinical judgment and decision-making abilities of nurses can influence many health outcomes.

Clinical judgement emerged as a very strong component for inclusion in an audit tool. The nurse's ability to assess a patient and interpret findings is regarded as kingpin to the provision of competent, quality patient care to both mother and baby throughout the course of admission in a maternity ward, whether antenatal, intrapartum or post-partum.

An audit tool must provide evidence of clinical assessment which includes relevant history of all factors that may influence the care of the patient including the foetus / baby, whether in labour or not. There must be evidence of critically considered action where deviations from normal expectations are identified.

The expert group was convincing in their argument that nursing records must present a full narrative of the patient's admission to a healthcare facility and this includes a reflection of pertinent interaction between nursing staff and the mother, nursing staff and members

of the multidisciplinary team and interaction between the mother and her baby and significant others. Notes in the nursing documentation audited, frequently created a perception of a routine type of recording which is done for the sake of recording with very little, if any, personalisation that would allow the reader to distinguish between one patient and another and with very little evidence of personal interaction.

The importance of the relationship between inter-personal aspects of care and safe, quality nursing care, has, according to Bradley *et al.,* (2016), not been given the full recognition it deserves. One of the indicators for Millennium Development Goal No. 5 – Improve Maternal Health – is the proportion of births attended by skilled health personnel (Millennium Development Goals: Country Report 2015). In their systematic review, Bradley *et al.,* found that in Sub-Saharan South Africa, only 52% of mothers elected to have their babies in a healthcare facility. While in South Africa, this figure is reported to be 91%, the goal of 100% has not been attained (although this is contradicted in a study done by Mulaudzi *et al.,* (2015) who asserted that it had been achieved). Bradley *et al.,* and other researchers found that although many variables played a role in failure to reach the goal, an important reason was that mothers did not experience the emotional and interpersonal care that they expected during this important and vulnerable event in their lives and preferred to be cared for by traditional attendants or private midwives. Srivasta *et al*., (2015) used a literature review to identify the determinants of women's satisfaction with maternal care in developing countries and found that studies in many countries concluded that interpersonal aspects of care ranked high in the order of a mother's perception of quality care. Among some of the aspects of interpersonal care that they listed, were "therapeutic listening; caring behaviour such as smiling and politeness; prompt pain relief; kindness and others". The long list of aspects which could be denoted as indicators of interpersonal aspects of care, as well as the subjectivity with which each one could be perceived, make their measurement complex. Goodrich (2016), is of the view that while it is one of the components of quality care, the other two being safety and clinical effectiveness, its description is usually abstract. An audit tool will have to focus on and define specific indicators.

The group agreed that interaction between the multi-disciplinary team should be measured as an important aspect indicating the participation between members of the team (including the patient) in decision-making related to clinical action. However, a study by Professor T Heyns which is yet to be published but findings of which were shared by the professor in a presentation given at a Memorial Lecture in Florida, Johannesburg on 1st February 2019, found that interaction between nurses and other professionals including doctors, consisted mostly of instructions and prescriptions by the doctor or other professional with minimal input by the nurse and even less by the patient. An audit tool may be hard-pressed to provide evidence of multi-disciplinary and patient participation in decision-making around patient care but its design should strive to do so. This will not only afford the nurse an opportunity to reflect on and change behaviour but also promote continuity of care through the sharing of relevant and accurate information amongst health care professionals (Griffith 2016; Valera *et al.*, 2017).

Irrelevant and stereotypical records which permit little distinction between one patient's records and another was a common experience shared by all members of the group. In this regard, Griffith (2016), in an article directed at midwives, warns that "Records are never neutral – they will either support a midwife's care or condemn the midwife if record entries are poorly written ……". The need for records to be authentic and relevant is reiterated by a number of authors, (Coskun *et al.*, 2017; Andrews *et al.,* 2015; Geyer, 2005). According to Andrews (2015), record keeping falls within the top five reasons for sanctions against nurses in Britain. Statistics for South Africa are not readily available.

The group was unanimous in their opinion that an audit tool must reflect **compliance to recordkeeping rules**. Some rules emanate from legislation and others from practical experience. Both the National Health Act, South Afruca 2003, Act 61 of 2003, Chapter 2, Section 13) and Regulation 2598, 1984, Chapter 3, Paragraph 3 (a) require nurses to keep records of all the care rendered to the patient as well as the patient's response to treatment. Regulation 387, 1985, The Acts or Omissions in Respect of Which The Council May Take Disciplinary Steps, Chapter 2, Paragraph 5, make provision for disciplinary action if the midwife wilfully neglects to record patient care or the patient's response to

treatment. Compliance to legislation can only be assessed if nursing records provide the evidence. An article by Singh and Mathuray (2018), questions whether nurses know and understand the legislation related to their practice and associated responsibilities, one of which is “having proper documentation”.

Other rules integrate legality with practicality. For example, for records to be useful, they must be legible and in this regard, Griffith (2016) places the responsibility for the standard of handwriting squarely in the hands of the midwife, citing a legal case in which a midwife was found negligent because her handwriting was illegible and did not allow establishment of the facts. Records must be written timeously – when an event occurs it must be recorded at the time of occurrence or as soon thereafter as possible (Griffith, 2016).

For purposes of identification, biographical data must be recorded. Data must be complete and accurate. Again, this rule is closely linked to legislation. Regulation R387, 1985, Chapter 2, Paragraph 4 (a), allows for disciplinary action if the nurse fails to identify the patient.

Abbreviations, if used must be standardised and understood by all healthcare personnel who use the records (Geyer, 2005). In a study done by Dutra *et al*., 2016, they wanted to compare records before and after a specific teaching intervention and one of the variables included in the study was the use of standardised abbreviations. Although the abbreviations they referred to were measurements, the use of standardised measurements was found to be critical in ensuring quality care.

An **audit tool** should be simple and easy to use and designed in such a way as to leave no doubt about how to score the elements it intends measuring. Its design should be of such a nature that its use can be widespread and not confined to any particular organisation or healthcare facility. Ideally, audit elements should be aligned to universal standards such as the *National Core Standards for Health Establishments in South Africa*

(NDoH, 2011) or in maternity wards to *Guidelines for Maternity Care in South Africa* (2015).

A tool with prompting questions may be more user friendly than one without.

Statements that provide the opportunity for a “not applicable” response should be kept to a minimum.

6.3 EXPERT GROUP 2 – DELPHI TECHNIQUE

In this section an overview of the responses by the Delphi group to the opinions expressed by the Nominal Group will be presented.

The group who participated in the Delphi Technique was tasked with using the information provided by the expert nominal group to agree on the elements that should be included in an audit tool to measure the quality of nursing care in a maternity ward.
Three major areas of measurement were proposed by the expert group. Explanation for each of these as given below was given to the Delphi group.

The first area centred around the physical care of the pregnant mother and the assessment of foetal well-being, throughout pregnancy and labour and the mother and the baby after delivery. It included inter personal aspects of the care of the mother, the interaction between nursing staff and other members of the multi-disciplinary team and evidence that nurses were monitoring the interaction between the mother and the baby (bonding).

The second area of measurement was related to clinical judgement, that is, the midwife’s competence in interpreting findings on assessment and planning appropriate nursing care and interventions based on findings.

Thirdly, a comprehensive audit tool must have the ability to measure compliance to principles of good recordkeeping since records frequently present the only evidence of care.

6.3.1 Delphi – Round 1

First round results are presented in Table 6.3

Table 6.3: First round results

Round	Response Rate	Overall Consensus	Disagreement
1	60%	78%	22%

After round 1, a total of 11 statements had to be reformulated. Most of the debate centred around the meaning of inter and intra personal aspects of care. Respondents required clarity on statements related to members of the multi-disciplinary team and although authenticity of records was considered to be vital, the question on how authenticity would be measured was raised.

The group was unanimous in their opinion that the audit tool must be simple and easy to use.

The section on the audit tool proved to be the second area of substantial disagreement with four out of the five statements in this section having to be reviewed and finally resulting in the removal of one of the statements after round 2.

The elements in contention were related to the length of the tool which would be substantial if all main and sub-elements were included, the question of whether the tool should allow a “partial compliance” to any element and whether administrative (non-nursing) aspects should be included in the tool.

6.3.2 Delphi – Round 2

Table 6.4 reflects the results of round 2 of the Delphi.

Table 6.4: Second Round Results

Round	Response Rate	Overall Consensus	Disagreement
2	67%	62%	38%

In round 2, the same two areas of contention as those in round 1 were evident. After round 2, seven (7) statements were reformulated.

A reformulated statement regarding the authenticity of records was found to be acceptable to all respondents in round 3.

Consensus was reached that certain administrative aspects should be included in an audit tool since it was agreed that quality care includes the economic use of resources.

One statement regarding the inclusion of elements in an audit tool was removed since the respondents indicated that the statement overlapped with another statement in this section.

6.3.3 Delphi – Round 3

By the end of round 3, consensus of 93% was achieved and is reflected in Table 6.5

Table 6.5: Third Round Results

Round	Response Rate	Overall Consensus	Disagreement
3	73%	93%	7%

In summary, respondents commented that the entire spectrum of pregnancy, labour and the post natal period should form part of the evaluation of the quality of nursing care in a maternity ward and must therefore be included in an audit tool.

Comprehensive assessment is the foundation for quality nursing care and will require narrative to provide evidence – ticks (✓) will not be an appropriate indication of having met this criterion. A holistic approach including a psychosocial assessment must be adopted. The identification of risk factors related to each phase of pregnancy labour and the puerperium should be considered critical as these frequently form the basis of an adverse event.

There must be clear scales to determine the level of quality of each criterion included in the tools.

Clinical judgement is an essential component of professional care and is measured in the actions following assessment. It allows clinical decision-making that demonstrates the nurse's ability to plan and implement interventions that reflect individualised care.

Although the tool should be designed to measure the entire spectrum of pregnancy, it should include only main elements with well-defined explanatory guidelines and sufficient training on using the tool to ensure individual interpretation is kept to a minimum. This may require separate audit tools for evidence of monitoring the progress of labour using appropriate tools at appropriate times (cardiotocograph, partogram) as each of these in its own right consist of a number of different elements.

Measurement of compliance to principles of good record keeping was considered vital in terms of continuity of care and the role it plays in terms of potential litigation.

Inclusion of selected administrative elements were considered important aspects of patient care but that they should form a short and uncomplicated part of the tool.

6.4 THEORETICAL EXPERT GROUP

Participants in the theoretical expert group were considered experts in the field of clinical midwifery by virtue of their experience and membership in a group of midwives considered by the private healthcare facility in which this study was undertaken, to be experts.

Preparation for the interview was accomplished by planning the questions that would be posed to the group and reflected in Table 6.6. below. A slide presentation was used to explain the research topic and its rationale to the group. The proposed record audit tool was presented to the group who were invited to provide comment and opinion.

Table 6.6: Theoretical Expert Questions

Question	Possible Source of Discovery
Will the proposed audit tool be able to measure and evaluate:	
Relevance of information in the nursing records?	Comparison of information contained in assessment document with that in progress and other reports
Comprehensiveness of the nursing records?	Evaluation of nursing records in terms of reports received from laboratories, nurse / patient interaction, interventions by members of the multi-disciplinary team
Whether records are legible including signatures?	Observation of all or any of the documents on which nurses record information.
Whether there is compliance to relevant legislation?	Initial assessment and reporting on patient response to treatment in terms of Regulation 2598 of 1984.
Whether entries have been made in chronological order?	Correlation between dates, times and events and various nursing documents.
Whether biographical data and other records are accurate?	Comparison of data between administrative documentation and nursing documentation.

6.4.1 Discussion

The group demonstrated a very favourable response to the proposed record audit tool. All of them shared the view that it would contribute to the elimination of unnecessary and what they termed to “archaic” reporting using the example of the acronym “SOAPIE” (subjective, objective, assessment, planning, implementation and evaluation) to justify their opinion. They explained that because there was an expectation to write their reports using this acronym, often times it resulted in the recording of totally irrelevant information simply because the nurse has to write something alongside each of the letters of the acronym. They agreed that the elements of measurement would ensure that the *relevance* of nursing records will be evaluated through use of the tool.

Simply by looking at the possible and multiple sources of discovery, that is, which records could be accessed to evaluate comprehensiveness, they agreed that the proposed record audit tool would predispose to the evaluation of *comprehensiveness*. They approved of the idea of not confining the audit to a single page in a nursing document but conducting a thorough perusal of all relevant documents to evaluate comprehensiveness.

They agreed that the tool does accommodate the issue of *legibility* and there was no dispute that this should be so. They did, however, question how they were going to get nurses to write legibly as they experience this as an ongoing problem.

Although they agreed that the tool should measure compliance to relevant *legislation* they were doubtful as to how this would be done. The current tool does contain a similar element but compliance is related to prescription and administration of medication and recordkeeping principles such as legibility. The interviewer explained that records should indicate the application of legislation such as recording the patient’s response to treatment which is regulated by Government Notice No. R. 2598 of 1984 – Regulations Relating to the Scope of Practice of Persons Who are Registered or Enrolled under the Nursing Act, 1978. As an added contributor to the provision of quality nursing care, the group recognised the importance of the understanding by auditors on how to determine whether relevant legislation has been applied to the provision of nursing care.

The question of recording events at the time of occurrence *(chronology)* was regarded by the group as important and possible to measure using the proposed record audit tool, since each of them has, in the past, been confronted with questions regarding the recording of the order of events as they occur. There was some concern about what would happen if a nurse forgot to make an entry at the time of occurrence but this concern was allayed when they agreed that they do have rules in place to manage such a situation.

They were satisfied that the final question regarding of accuracy of biographical data could be answered in the affirmative and reiterated that this element is already being audited using the current tool.

The discussion with the experts confirmed the need for review of the documents currently in use. It also reinforced the opinion already formed that a tick list prompting nurses to report on certain aspects of nursing care lends itself to diminished 'critical, analytical thinking' and poor interpretation of problems and they felt the proposed record audit tool will encourage full reporting and the need to interpret and act upon information gained during assessment.

They commented on the usefulness of the proposed record audit tool as a training tool especially in light of a high staff turnover.

In conclusion, the group was of the opinion that the proposed audit tool will have clinical utility, that is, it will help develop knowledge that will have an impact on the quality of care provided in a maternity unit.

The group was invited to share the record audit tool with staff in their units and to provide feedback to the researcher in the event of same being given.

6.5 CONCLUSION

In this chapter, the opinions of the nominal group of what should be included in an audit tool to measure the quality of nursing care in a maternity ward and confirmation by the Delphi group of elements that should be included in an audit tool were presented. The opinion of a focus group of theoretical experts was sought to confirm the clinical utility of the proposed record audit tool.

Findings confirmed the views expressed by the focus groups that documents used for recording nursing care posed problems for good recordkeeping and needed review. While taking this opinion into consideration in the discussion, the specific focus of this study was the development of an audit tool.

In Chapter 7, the record audit tool will be presented.

CHAPTER 7 : DEVELOPMENT OF THE RECORD AUDIT TOOL

7.1 INTRODUCTION

The purpose of the study was to develop a record audit tool for monitoring and improving the quality of nursing care rendered to patients in the maternity units at a private health care facility. This chapter will describe the process followed and the rationale behind the development of the tool as well as the processes followed to establish the clinical utility of the tool.

7.2 DEVELOPMENT OF THE TOOL

7.2.1 Rationale for developing the tool

The intention of the tool currently being used in maternity units in the healthcare facility in which this study was undertaken, is to measure the quality of nursing care in the maternity units. The validity of the tool became questionable when despite favourable audit results, records, when scrutinised after an adverse event signaling the potential for litigation, did not in fact produce evidence of quality care. One of the objectives of this study is to refine or develop a tool which will measure the quality of nursing care. The tool will aim to improve quality of care by facilitating the identification of non-compliance to standards and which according to Pertille, (2018) and Nandaprakash, (2015), will promote accountability amongst nurses through their actions to address these non-compliances to improve the quality of care.

7.2.2 Process followed to develop the tool

Based on the results of the Delphi group and consultation of the literature on suitable models for assessing clinical judgement and person-centred care, after numerous iterations, the researcher, together with her supervisor, developed the format and arranged the content of the record audit tool which was presented to the group of theoretical experts for their opinion on its clinical utility. They concluded that the proposed record audit tool will enable the measurement of clinical judgement, person-centred care and adherence to principles of good recordkeeping.

7.3 THE AUDIT TOOL FORMAT

In order to measure the quality of care as opposed to simply measuring the provision of care, themes under which different aspects of care resorted, were identified by the Nominal Group and agreed by the Delphi Group. The themes, ***clinical judgement***, ***interpersonal care*** and compliance to the ***principles of good recordkeeping*** were all deemed equally important in providing a holistic evaluation of the quality of care. Although, in reality, the themes are inter-linked and cannot be separated from each other, the tool is divided into three sections; each section being dedicated to one of the three themes. After several iterations and a literature search to find suitable models according to which the criteria for the section in question could be assessed, the researcher, together with her supervisor decided on where to place content. Each section commences with a definition and a standard followed by the criteria tabled for assessment. Each section allows scores for total compliance, partial compliance, non-compliance and a judgement of the applicability of the criterion being assessed.

7.3.1 Section 1: Clinical judgement

While acknowledging that there may be a variety of terms used interchangeably to signify clinical judgement, Tanner, 2006 defines it as “the interpretation or conclusion about a patient’s needs, concerns, or health problems, and / or the decision to take action (or not) …..” and her ***Clinical Judgement Model*** has been applied for the purposes of this study. Section 1 of the record audit tool is reflected in Table 7.1 to 7.5 overleaf:

7.3.1.1 Definition

Clinical judgement refers to the ways a midwife comes to understand the problems existing or concerns of the patient, to attend to salient information and to respond in concerned and involved ways (Benner et al, 1996). Tanner's clinical judgement model (2006) involves noticing, interpreting and responding appropriately to problems and concerns.

7.3.1.2 Standard

There is evidence in the maternity record that the midwifery unit staff have correctly identified problems and concerns of the patient through communicating with the patient and attending to information and have responded appropriately to problems and concerns.

Table 7.1: Antenatal Record

	Criteria There is evidence that:	**Type of judgement**	**Score** 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	**Sources of evidence**
1.1.1.	The socio-economic and cultural background of the patient has been assessed	Noticing		• Physical examination (identifying at risk factors e.g. anaemia) • Abdominal inspection and palpation
1.1.2.	The obstetric history has been taken			
1.1.3.	A medical and surgical history has been taken			
1.1.4.	The mothers expectations / plans for the birth have been listened to			

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.1.5.	The information recorded above has been used to make an initial assessment and prediction of the course of the pregnancy	Interpretation		• Vaginal examination • Foetal wellbeing including growth and heart rate
1.1.6.	Any changes occurring during pregnancy have been noticed and responded to (clinical, inter-personal and social)	Responding		
1.1.7.	The midwife responded to the patient's identified needs and concerns including referral as appropriate to a medical practitioner			

Auditor's comments:

Table 7.2: Latent and Active Phase Of Labour

	Criteria There is evidence that:	Type of judgement	Score	Sources of evidence
1.2.1.	On admission, the mother's physical, obstetric and psychological status have been assessed	Noticing		• Physical examination (identifying at risk factors e.g. anaemia, hypertension) • Abdominal inspection and palpation • Vaginal examination • Foetal heart rate • Progress of labour (partogram) • CTG tracing and interpretation • Liquor
1.2.2.	The history of labour thus far has been taken (contractions, show, ROM)			
1.2.3.	The foetal heart rate and rhythm have been assessed			
1.2.4.	During the latent phase of labour, the progress of labour (uterine contractions, cervical changes), the mother's psychological status and the foetal wellbeing have been assessed at least four hourly.			
1.2.5.	During the active phase of labour, the progress of labour (uterine contractions, descent of presenting part), the mother's psychological status and the foetal wellbeing have been assessed on at least a half-hourly basis.			
1.2.6	During the active phase of labour, the progress of labour (cervical changes / descent of presenting part,) have been assessed via vaginal examination at least two hourly.			
1.2.7.	The information recorded on admission has been used to make an initial assessment and prediction of the course of the labour	Interpretation		

	Criteria There is evidence that:	Type of judgement	Score	Sources of evidence
1.2.8.	The information recorded during labour has been used to plan frequency of / repeated assessments and predictions of the course of the labour			
1.2.9.	Any changes occurring during labour have been noticed and responded to (clinical – mother and foetus) and psychological	Responding		
1.2.10.	The midwife responded to the patient's identified needs and concerns including referral, as appropriate, to a medical practitioner			
1.2.11.	The midwife communicated with the mother giving supportive guidance and encouragement			
1.2.12.	Support persons have been acknowledged and orientated			

Auditor's comments:

Table 7.3: The Second Stage of Labour

	Criteria There is evidence that:	**Type of judgement**	**Score** 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	**Sources of evidence**
1.3.1.	The onset of second stage was identified and the time recorded	Noticing		• Labour record • Foetal heart recordings • Nursing notes • Doctors' notes
1.3.2.	On commencement of the second stage of labour, the mother's physical status (including hydration, status of the bladder) and psychological status was assessed			
1.3.3.	The foetal heart rate and rhythm were assessed at least after every second contraction			
1.3.4.	Factors influencing effective bearing down / pushing were assessed			
1.3.5.	During the second stage of labour, the descent of the foetus, the frequency and duration of contractions, vaginal bleeding and the condition of the perineum are assessed.			
1.3.6.	The onset of bearing down efforts and the time of delivery recorded			
1.3.7.	The information recorded during second stage was used to assess and predict of the course of the delivery (mother and foetus)	Interpretation		

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.3.8.	Any risk factors to the mother (including bleeding, and prolonged second stage) have been noticed and responded to	Responding		
1.3.9.	Any risk factors to the foetus (including foetal heart rate and rhythm and presence of cord) have been noticed and responded to			
1.3.10.	The midwife responded to the patient's identified needs and concerns including referral, as appropriate, to a medical practitioner			
1.3.11.	The midwife communicated with the mother giving supportive guidance and encouragement			

Auditor's comments:

Table 7.4: The Third and Fourth Stage of Labour

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.4.1.	The duration of the third stage was identified and the time recorded	Noticing		• Labour record • Nursing notes • Maternity register • Maternity record • Neonatal record • Nursing care plan • Prescription chart and medication administration record
1.4.2.	On commencement of the third stage of labour, the mother's physical status (including colour, respiration, uterine contraction, amount of blood loss, condition of the perineum) was assessed			
1.4.3	Abdominal palpation was performed to exclude to the possibility of an undiagnosed twin			
1.4.4.	The newborn's APGAR score was assessed and recorded at 1 minute and 5 minutes			
1.4.5	The baby's physiological needs immediately after delivery were assessed (warmth, cord and eye care, bonding)			
1.4.6.	The mother's temperature, pulse and respiration and blood pressure were measured and recorded hourly after delivery (or more frequently depending on risk)			
1.4.7.	The placenta was examined to check completeness of cotyledons and membranes, size and mass, retro placental clot, condition of cord			

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.4.8.	The information recorded during second stage was used to assess and predict possible complications e.g. PPH, hypertension, embolus	Interpretation		
1.4.9.	Any risk factors to the mother and/or the baby were immediately reported to a medical practitioner	Responding		
1.4.10.	Appropriate emergency care was given in the event of risk factors being present while awaiting the arrival of a medical practitioner			
1.4.11.	Vaginal lacerations or episiotomy were sutured			
1.4.12.	Oxytocic medications were administered as per protocol to assist active management of third stage and to prevent PPH and the baby was put to breast			
1.4.13	Baby-friendly principles implemented (baby dried and given to mother / father - skin to skin to promote bonding, breast feeding initiated to promote uterine contraction).			
1.4.14.	The midwife communicated with the mother giving supportive guidance and encouragement			

Auditor's comments:

Table 7.5: Postpartum Period

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.5.1.	The mother has been assessed for vaginal bleeding, uterine contraction, fundal height, temperature, pulse and blood pressure at least every four hours after delivery	Noticing		• Post Partum Record • Observation Charts – vital signs, observations pertinent to the puerperium • Fluid Balance Charts • Neonatal record - First Assessment of the Newborn • Patient Progress Record • Discharge record
1.5.2.	The mother has passed urine within six hours after delivery			
1.5.3.	The perineum is assessed for healing at least once daily			
1.5.4.	The breasts are assessed at least once daily for softness, presence of colostrum, nipple health			
1.5.5.	The first assessment of the newborn was conducted after transfer of the mother to the post natal ward			
1.5.6.	Mother is supported by significant other			
1.5.7.	Mother's / father's immediate reaction to baby assessed			
1.5.8.	The information recorded during the third and fourth stages of labour, including immediate assessment of the newborn, was used to assess and predict possible complications e.g. PPH, hypertension, embolus, respiratory distress (newborn).	Interpretation		

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.5.9.	Any risk factors to the mother and/or the baby were immediately reported to a medical practitioner	Responding		
1.5.10.	Appropriate emergency care was given in the event of risk factors being present while awaiting the arrival of a medical practitioner			
1.5.11.	Physiological changes after delivery (breast, lochia, contraction of the uterus) are monitored at least daily.			
1.5.12.	Baby's general condition (cord, eyes, buttocks, passage of meconium, stools and urine) are monitored at least daily			
1.5.13.	Separation between mother and baby kept to a minimum			
1.5.14.	Mother's attempts and baby's response to breast feeding monitored			
1.5.15.	Evidence of bonding monitored (mother's willingness to care for baby, cuddling, protectiveness)			
1.5.16.	Evidence of supportive relationships (visits by father / partner, grandparents etc)			

	Criteria There is evidence that:	Type of judgement	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.5.17.	The midwife communicated with the mother giving supportive guidance and encouragement and appropriate health education and information			

Auditor's Comments:

7.3.2 Section 2: Interpersonal care

The model described by Santana et al (2017) for implementing person centred care has been applied for the measurement of interpersonal care. According to the authors, person centred care is recognised by the World Health Organisation as a significant factor in the provision of quality health care and one which encourages a partnership between the healthcare provided and the person receiving it and in so doing, contributes to care that is sensitive and unique to the person's own needs. In this section, a definition is included for each of the subsections. Section 2 of the Record Audit Tool is reflected in Tables 7.6 to 7.8 below:

7.3.2.1 Definitions

Interpersonal care or person centred care (Santana et al 2018) refers to the way in which interaction between people (i.e. patients and their significant others, relatives, and healthcare professionals), is encouraged through cultivating

communication, provision of respectful and compassionate care, engaging the patient in managing their care and integration of health.

Cultivating communication refers to the active role played by the healthcare professional in promoting participation by the patient in their own healthcare by understanding and incorporating the patient's values and belief systems, preferences and needs into healthcare practices. It requires active listening and sharing of information**.**

Provision of respectful and compassionate care promotes relationship-building by adopting an empathic, sympathetic and reassuring approach to the patient by acknowledging personal, cultural, spiritual and religious influences on healthcare practices and recognising the patient as an expert of her own health.

Engaging patient in managing their care refers to allowing patients to participate in decision making related to their healthcare, thereby empowering them to take charge of their own health and experiencing a more positive healthcare experience.

Integration of health refers to the communication of the patient's health status among members of the multidisciplinary team whether in or out of hospital.

Interaction between the nursing staff and the mother refers to the positive relationship which develops between the nurse and the mother. In a study by Petrou et al (2017), the word "bonding" is used to describe this relationship.

Interaction between the nursing staff and other healthcare professionals refers to the collegial relationship between members of the healthcare team involved in the care of the mother and the baby.

Interaction between mother and baby refers to mother-child bonding which is defined by O'Higgins et al (2013) as the affectionate feelings that the new mother has towards her baby. These feelings begin in pregnancy and are referred to as "maternal attachment".

Family interaction refers to evidence of positive behaviours demonstrated by significant members of the mother's family.

7.3.2.2 Standard

There is evidence in the maternity record that attempts to promote positive relationships between the nurse and the patient, the nurse and members of the multi-disciplinary team, the mother and the baby and the interaction between family members, have been included in the nursing care plan through communication, respectful and compassionate care, engaging patients in managing their care and integration of care.

Table 7.6: Interaction between Nursing Staff and Mother

	Criteria There is evidence that:	**Phase of IP care**	**Score** 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	**Sources of evidence**
1.1.	All information recorded on admission that will impact on the patient's admission is reflected in an individualised care plan (authenticity of recording)	Cultivating Communication		• Admission record • Medical, surgical,

	Criteria There is evidence that:	Phase of IP care	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
				obstetric and family history. • Baseline assessment on admission
1.2.	There is evidence that the patient's unique needs / problems are discussed and that the patient participates in decision-making regarding the needs identified. (Emotional support, sensitivity to religious, spiritual, cultural practices, health education, social / personal issues)	Respectful and compassionate care		• Nursing Care Plan • Progress Report
1.3.	There is evidence of cooperation between the patient and the nurse in working towards meeting the identified needs / problems. (Patient satisfaction)	Engaging Patients in Managing their care		• Nursing Care Plan • Progress Report
1.4.	There is evidence of patient satisfaction that the needs / problems identified were resolved. (Patient satisfaction)	Integration of care		• Nursing Care Plan • Progress Report • Discharge Record

Auditor's Comments:

Table 7.7: Interaction between Nursing Staff and Other Health Professionals

	Criteria There is evidence that:	**Phase of IP care**	**Score** 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	**Sources of evidence**
1.1.	Visits by members of the multi disciplinary team are recorded and discussions, decisions, instructions, requests, prescriptions clarified.	Integration of care		• Nursing records – progress report • Records by members of multi disciplinary team
1.2.	Evidence of implementation of interventions prescribed by members of the multidisciplinary team	Integration of care		• Nursing records – progress report • Referral notes • Laboratory reports • Radiology reports
1.3.	Evidence of administration of medication and other treatments as prescribed / instructed	Integration of care		• Nursing records • Prescription and administration of medication record

	Criteria There is evidence that:	Phase of IP care	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.4.	Evidence of patient response to administration of medication and other treatments	Integration of care		• Nursing records – progress report • Laboratory reports • Radiology reports

Auditor's Comments:

Table 7.8: Interaction between Mother and Baby

	Criteria There is evidence that:	Phase of IP care	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.1.	There is evidence that the mother shows signs of coping and bonding with her new baby (affection, willingness to care for the baby, protectiveness)	Engaging patient in managing their care		• Nursing Record – progress report, neonatal record.
1.2.	There is evidence of sound family relationships (husband / partner visits and interest during labour and after delivery), family visits depending on hospital policies.	Engaging patient in managing their care		
1.3.	There is evidence that the patient's unique needs / problems related to bonding and family interaction are discussed and that the patient participates in decision-making regarding the needs identified. (Emotional support, health education, social / personal issues)	Engaging Patients in Managing their care		

Auditor's comments:

7.3.3 Section 3: Compliance to Principles of Good Recordkeeping

There is a plethora of literature related to the principles of good record keeping (Selvie, 2017; Griffith, 2015, 2016; Scruth, 2014; Geyer, 2005). All of them share the view that good records play an important role in ensuring continuity of patient care through communication of pertinent information to all members of the multi disciplinary team, that is, records are comprehensive, accurate and chronological. There is also no dissent that they should comply with relevant legislation and be legible if they are to be useful at all. No specific model has been used as an application for this section – it is based on principles of good recordkeeping described in research studies and academic articles. Section 3 of the Record Audit Tool is reflected in Table 7.9 below:

7.3.3.1 Definition

A good nursing record is one which provides a "clear, concise and complete" record of the care received by a patient and in this way promotes continuity of care through the sharing of information by all members of the multi-disciplinary team (Selvi, 2017). The principles of relevance, comprehensiveness, accuracy, legibility, chronology and compliance to relevant legal requirements must be observed.

7.3.3.2 Standard

There is evidence in the maternity record that the midwifery unit staff adhere to the principles of good recordkeeping in order that a full account of the care and treatment provided and the patient's progress and response to treatment can be given.

Table 7.9: Compliance to Principles of Good Recordkeeping

	Criteria There is evidence that:	Principles	Score 2 = compliant; 1 = partially compliant; 0 = not compliant; N/A = not applicable	Sources of evidence
1.1.	Records including biographical data are accurate and honest i.e. late entries, alterations and deletions managed according to protocols	Accuracy		• Administrative records (admission and discharge records) • Identification bands • Nursing Records • Reports from other departments (Radiology, Laboratory).
1.2.	Records are relevant – they must relate to the patient's unique problems / needs	Relevance		
1.3.	Records must provide a detailed account of all significant events, patient progress, deviations from normal and patient outcomes.	Comprehensiveness		
1.4.	Records are written in a chronological order at the time of occurrence of the event.	Chronology		
1.5.	Records, including signatures and ranks are legible	Legibility		
1.6.	Records comply with relevant legal requirements	Legal compliance		

7.4 CONCLUSION

In this chapter, the record audit tool which consists of elements of measurement agreed by the expert groups has been presented. In considering the discussions held with the focus groups, the tool was presented to a group of theoretical experts for their comment and opinion on the clinical utility of the tool. They concluded that the tool will be useful in measuring clinical judgment, person-centred care and adherence to the principles of good recordkeeping.

The summary of findings, limitations of the study and recommendations for nursing practice, nursing education and future research will be presented in Chapter 8.

CHAPTER 8 : SUMMARY, MAIN FINDINGS, LIMITATIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

The previous chapters provided an overview of the study, the literature related to the evaluation of quality nursing care through audit of nursing documentation, the research methods and results.

The purpose of the study was to develop a record audit tool for monitoring and improving the quality of care rendered to patients in the maternity unit at a private health care facility. This chapter will provide a summary of the study and outline the limitations and recommendations for nursing education, nursing practice and for future research.

8.2 SUMMARY

The first phase of the study was quantitative, the intended purpose being to compare audit scores obtained by the internal audit committee and those obtained by the researcher after auditing the same documents. A total of 27 files from Hospital A and 30 from Hospital B were audited with the intention of conducting a de novo audit to establish the quality of the auditing and to determine problem areas that may require attention when developing a new audit tool.

All subsequent phases were qualitative in nature. In phase two, focus groups were used. Nurses working in the units constituted the focus groups and their views on why nurses fail to comply with requirements for recordkeeping as outlined in the tool currently in use.

In phase three, which was designed to obtain the views by an expert group of nurses on what should be assessed to ensure that quality nursing care is provided in a maternity unit, a nominal group technique was used. The results of the focus groups and the comparative audit were presented in a nominal group to provide a background and evidence of the problems being experienced. The expert nurses were asked to consider what should be included in an audit tool to measure the quality of nursing

care in a maternity ward. The views of this group were arranged into themes and sub-themes which were then presented to the second group, using the Delphi Technique, which was part of phase four of the study. The Delphi study established the opinion on a suggested new tool for the purpose of auditing nursing records.

Finally, an audit tool was developed based on the recommendations of the experts who participated in the Delphi group. The proposed tool was shown to a group of theoretical experts to establish their views on its clinical utility and solicit recommendations for changes, after which the tool was finalised.

8.3 MAIN FINDINGS

8.3.1 Quantitative findings

The documentation audits revealed differences in scores obtained in the audits between Hospitals A and B suggesting that interpretation of documentation and audit rules were either not uniformly applied or understood by members of the audit teams of each of the hospitals.

A comparison of the results obtained by the researcher and combined results of Hospitals A and B differed considerably for at least three elements of measurement, the researcher's scores being lower than those obtained by the hospital audit teams. The elements in question included *Patient Assessment* for which a 20% difference was obtained; *Nurse Care Programme* which revealed a 24% difference and *Progress Monitoring* for which a 15% difference was found.

There was an overall 10% discrepancy in the total score obtained between the researcher's audit results and the combined score of both hospitals.

The audit tool currently in use, measures elements that are not directly related to nursing care and places high importance on these criteria by making them "critical factors" which must be met in order to achieve a score – a score higher than "normal factors" on the audit tool.

8.3.2 Qualitative findings

Focus groups in **Phase 2** of the study provided their views on why nurses do not comply to the requirements for recordkeeping as outlined by the Healthcare Facility's *Guidelines for Recordkeeping*. The interviews re-directed the researcher's views of poor recordkeeping by nurses. Rather than adopting the view that nurses' skills with regard to recordkeeping are wanting, discussions seemed to suggest that many other variables are at play when it comes to applying the principles of good recordkeeping.

The revelations of the discussion were arranged into four themes, each with sub-themes. The first theme revolved around the documentation used in the facility in which the study was undertaken and included sub-themes related to the structure of the document, the rules regarding how the documents must be used and thirdly, the nurses' orientation to the rules of recordkeeping in the healthcare facility.

The second theme was related to people, with the emergence of two sub-themes, the first being work expectations and the second, emotions which were interwoven throughout all the discussions.

The third and final theme centred around systems used by the Healthcare Facility and were separated into themes of on line administrative requirements and the archiving and destruction of documents.

Phase 3 of the study culminated in opinion by an expert group of nurses of what a revised record audit tool should measure to evaluate the quality of nursing care in a maternity ward. The group was unanimous in its opinion that the entire spectrum of pregnancy should be considered. The elements of measurement were agreed and arranged into themes which included *Clinical Judgement*, *Inter-personal Care* and *Compliance to Recordkeeping Requirements*.

In **Phase 4** their opinions were ratified by using the Delphi technique on a second group of experts to reach consensus on the content of a record audit tool.

The final part of Phase 4 consisted of the development of a record audit tool to measure the quality of nursing care in a maternity unit. The record audit tool was presented to a group of theoretical experts who agreed on the clinical utility of the tool.

8.3.3 Combined findings

The audit tool currently in use audits activities / actions that have been completed by nurses and other members of the multi-disciplinary team but does not audit the quality of nursing care. Although its intention is to measure quality care, the tool and its associated rules, promote a culture of compliance to achieving targets rather than to measuring quality. This may be related to the link between target achievement and performance management by the nursing management teams in the hospitals.

Possibly because of the different categories of nurses who are responsible for recording patient care in the nursing documentation, there appeared to be a lack of insight into certain aspects considered to be central to nursing such as a comprehensive patient assessment, the nursing diagnosis of problems and needs relevant to a specific patient and a care plan to address the needs and problems followed by an evaluation of patient response to interventions. Despite the importance of person centred care in the provision of quality patient care, there was very little evidence of such care in the records audited. In a commentary by Goodrich (2016) she attributes this to work culture and lack of time, the second feature of which seems to have been corroborated in discussions with the focus groups.

The audit tool claims to measure legal compliance but under the heading of this element, only the principles of good recordkeeping are measured. While the audits revealed reasonable compliance to the principles of good recordkeeping (88%), the researcher is of the opinion that some of the elements such as legibility and the accuracy of dates and times, should have been regarded as critical factors due to their importance in the event of potential litigation. The researcher is also of the opinion that legal compliance encompasses more than legibility to ensure that nurses do recognise the importance of relevant legislation as a professional imperative (Singh & Mathuray, 2018).

The factors contributing to poor compliance to requirements of recordkeeping as stipulated in the healthcare facility's guidelines for recordkeeping are more complex than an apparent lack of skill in this regard. Factors extraneous to nursing but impacting on nurses' workloads, lack of follow up training after initial orientation and documentation rules appear to have had a negative influence on good recordkeeping practices.

8.4 LIMITATIONS

The limitations identified in this study will be discussed below and are arranged in line with recommendations made by Price and Murnan (2004).

Population and sample size:

Practical considerations such as distance and scope influenced the selection of the population and the sample size.

Phase one of the study was conducted in two maternity units in a private healthcare facility consisting of 66 healthcare facilities in Southern Africa, 21 of which have maternity units. It is possible that the findings may differ in the 19 maternity units which were not included in the study.

The study was confined to the private healthcare sector and may not be entirely relevant to maternity units in the public sector.

Availability of data

Phase 1 was concluded over a period of only one month because of an insufficient number of files having been audited for purposes of comparison at one of the hospitals in which the study was undertaken. The possibility of a different set of audit results exists if the study had been conducted over a longer period of time.

Lack of prior research

Research on poor recordkeeping by nurses is abundant but literature on audit tools to measure the quality of nursing care was difficult to source and the researcher could find no evidence of such research having been done in South Africa.

Self reported data

Data collected from the focus group in Phase 2 of the study was self reported and therefore cannot be independently verified. This method of data collection was used because it related specifically to the question of inadequate compliance by nurses to recordkeeping requirements and was best answered by the very people who were responsible for producing nursing records.

The focus groups were passionate about their practice as midwives and the frustration they experienced with the nursing documentation and the documentation audit rules may have influenced their objectivity.

They may have viewed the interview as an opportunity to release their pent-up frustrations, unconsciously or consciously using techniques such as *selective memory* – possibly thinking about one very negative experience regarding recordkeeping and allowing this to blossom into a generalised claim that good recordkeeping is almost an impossible expectation in the circumstances in which they work.

Instead of admitting their own accountability with regard to recordkeeping, they may have *attributed* poor practices to external factors beyond which they had no control.

Given the opportunity to discuss their views in a non-threatening environment, the possibility of *exaggeration* of their problems must be considered.

Researcher bias

The researcher's sensitivity to poor reporting by nurses may be heightened by her experience in compiling reports for medico legal purposes. This may have resulted in a hyper-critical approach to documentation audits performed in Phase 1. Alert to this possibility, the researcher made a conscious decision to comply very strictly to the audit rules used by the Healthcare Facility's documentation audit committees.

Longitudinal effects

The duration of the study did not allow testing of the record audit tool that has been developed. Testing may result in having to amend the tool.

8.5 RECOMMENDATIONS FOR NURSING EDUCATION, NURSING PRACTICE AND NURSING RESEARCH

Nursing Practice

- Scores obtained in nursing record audits should not be linked to performance appraisal but should be used to identify and address problems with the intention of improving quality of nursing care.
- Consistency amongst auditors should be promoted by comprehensive training for the nurses who serve on the audit committees, on the description and application of criteria that must be measured together with a list of multiple sources of evidence that can be consulted to make a decision on compliance to each of the standards of care.
- A critical review of nursing documents used in hospitals should be undertaken to ensure a good structure that facilitates a logical flow of information and that eliminates duplication of records. The review should include decisions about information that can be provided by means of ticking a box and information that can only be provided by a narrative.
- A project to identify non-nursing responsibilities that are allocated to nurses and reduce the time for adequate recordkeeping and provision of quality nursing care should be undertaken to determine those tasks that could be allocated to other personnel.
- The implementation of a new record audit tool should be tested for its trustworthiness and should be followed by a re-audit of previously audited documents to determine effectivity in improving the quality of nursing care.

Nursing education

- Concepts such as clinical judgement and person-centred care which have been found by numerous studies to impact on patients' perceptions of quality nursing care should be included in curricula for nursing programmes.
- Consideration should be given to using case studies to consolidate an understanding of evidentially based principles of good recordkeeping and the medico legal implications of poor recordkeeping.

- Student nurses should be allocated to serve on audit committees as an additional enhancement to their understanding of the evidentially based principles of good recordkeeping.

Research

- The audit tool proposed in this study needs to be piloted to determine its trustworthiness and intent, that is, the improvement of quality nursing care in the maternity unit in which it is piloted.
- Much is written about person-centred care as an important ingredient for the provision of quality care. Although not a new concept (Goodrich, 2016), its meaning, how to overcome barriers to its implementation and reliable ways of measuring implementation in the South African context should be explored.
- A study exploring the extent to which nurses base and record their clinical decisions on clinical judgement may be useful in developing case studies for inclusion into curricula, in-service training and continuing professional development programmes.
- A study exploring an optimal design for documents used by nurses may contribute to the removal of some of the barriers to good recordkeeping practices.

8.6 CONCLUSION

There is global recognition of the integral part played by nursing records in the provision of quality patient care, the crucial role it plays in providing evidence in matters of litigation and its importance for purposes of academic research to improve healthcare.

Recordkeeping by nurses is interwoven in curricula for nurse education programmes and in many healthcare institutions has been the focus of in-service training and continuing professional development programmes and yet, academic studies continue to report on the poor state of nursing records.

Sound audit instruments and a paradigm shift in the focus of nurse record audits from one of a punitive approach to one of positive intervention by the nurses themselves to

address the factors influencing poor recordkeeping by nurses may result in a greater degree of professional accountability for adhering to the principles of good recordkeeping and in so doing, make a real and substantial contribution to quality patient care.

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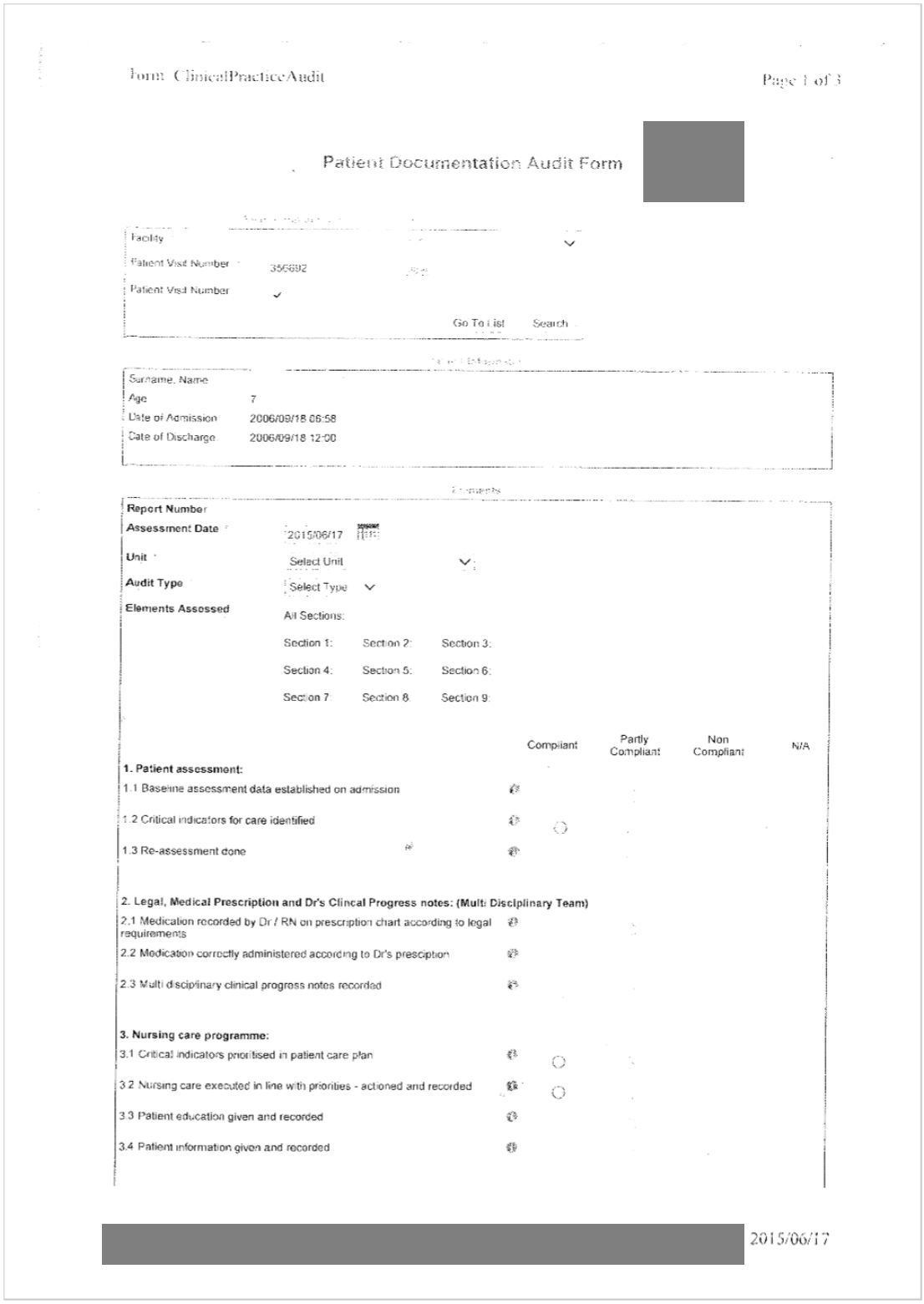
ANNEXURES

ANNEXURE 1: PATIENT DOCUMENTATION AUDIT FORM



Form: ClinicalPracticeAudit

Page 1 of 3

Patient Documentation Audit Form

[redacted]

Facility

Patient Visit Number 356692

Patient Visit Number

Go To List Search

Surname, Name

Age 7

Date of Admission 2006/09/18 06:58

Date of Discharge 2006/09/18 12:00

Report Number

Assessment Date 2015/06/17

Unit Select Unit

Audit Type Select Type

Elements Assessed

All Sections:

Section 1: Section 2: Section 3:

Section 4: Section 5: Section 6:

Section 7: Section 8: Section 9:

	Compliant	Partly Compliant	Non Compliant	N/A
1. Patient assessment:				
1.1 Baseline assessment data established on admission				
1.2 Critical indicators for care identified				
1.3 Re-assessment done				
2. Legal, Medical Prescription and Dr's Clincal Progress notes: (Multi Disciplinary Team)				
2.1 Medication recorded by Dr / RN on prescription chart according to legal requirements				
2.2 Medication correctly administered according to Dr's presciption				
2.3 Multi disciplinary clinical progress notes recorded				
3. Nursing care programme:				
3.1 Critical indicators prioritised in patient care plan				
3.2 Nursing care executed in line with priorities - actioned and recorded				
3.3 Patient education given and recorded				
3.4 Patient information given and recorded				

[redacted] 2015/06/17

4. Progress monitoring:	
4.1 Nursing care evaluated (critical care indicators, as well as progress)	
4.2 Nursing care plan updated where needed	
4.3 Appropriate referrals recorded	
4.4 Medical prescription updated, executed and recorded	
4.5 Effect of medication / treatment monitored and recorded	
5. Infection prevention and "Best Care Always":	
5.1 Risk factors identified and recorded	
5.2 Appropriate action for identified risks taken and recorded	
6. Safe patient environment and immediate ward environment:	
6.1 Risk factors identified and recorded	
6.2 Preventative measures taken and recorded	
7. Legal compliance:	
7.1 Legible handwriting	
7.2 Correct dates and times	
7.3 Only authorised abbreviations used	
7.4 Signature, qualifications	
8. Case management:	
8.1 Case manager visit recorded when expected patient outcome not reached	
8.2 Appropriate referrals recorded	
8.3 Correct authorisation for level of care	
8.4 Authorisation for second procedure obtained	
8.5 Motivation for use of specialised units obtained	
8.6 Patient isolation motivation obtained	
9. Nursing responsibility for accurate charting:	
9.1 Final diagnosis correct	
9.2 Co-morbidities identified and documented	
9.3 Ward equipment charged	
9.4 Correct charting of all stock used	
9.5 Credits of medication correctly done on discharge	
9.6 Signed discharge or transfer date and times by the doctors / nurse	
9.7 Clear evidence that patient movement (discharge) has been communicated and actioned to relevant department (e.g. Reception) within 1 hour of movement of patients	

[redacted] 6/17

Total 0 out of 0

Percentage 0 %

Created Date
Created By
Modified Date
Modified By
IsActive ✓

Link	Report Number	Unit	Audit Type	Date	Total	Percent	Is Active
No records							

[redacted]

[redacted] 2015/06/17

ANNEXURE 2: INFORMATION LETTER – FOCUS GROUP

P O Box 1755
Ruimsig
1739
Date to be inserted

Participant name and address to be inserted

Dear ……

INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES

I will be conducting nursing related research in the maternity unit of two large hospitals in a private healthcare group. The title of the research is *An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The research questions focus on the reasons for non-compliance to recordkeeping standards by nurses and whether or not a valid audit tool that reflects the actual standard of care by nurses can be used to design an intervention that will improve compliance to recordkeeping standards.

The research requires opinions and comment by nurses practising in the units as to why nurses do not comply with recordkeeping standards. This letter serves to request your participation in the group.

The group discussions will be recorded and a verbatim transcription will be used to analyse the content of the discussion. Your anonymity will be guaranteed. You will not be required to give your name during the discussion. Your name will not be used in the transcription. If quoted in any article, your identity will not be disclosed. Your name will not be mentioned in the research report.

Please be informed that:

- Participation is entirely at your own discretion and that you can refuse to participate or you may withdraw at any time

- You will not receive any material benefit as a result of your participation in the study
- Participation will not influence your employment or performance management in any way whatsoever
- You will be informed of the outcome of the study if you so wish

Should you agree to participate, you will be requested to complete a consent form which is a requirement by the ethical committee of the university before granting ethical clearance for the study.

I thank you for agreeing to consider participating in the study.

Yours Sincerely

Lesley Fletcher

ANNEXURE 3: INFORMED CONSENT – FOCUS GROUP

AN INTERVENTION TO IMPROVE RECORDKEEPING BY NURSES IN MATERNITY UNITS IN A PRIVATE HEALTHCARE FACILITY

INFORMED CONSENT

I _____ (print name in full) hereby consent to participate in group discussions which will focus on the reasons for non-compliance by nurses to meet the required standards for recordkeeping. I understand that the discussions will be recorded and a verbatim transcription will be made. I understand that even if my name is mentioned during the discussions, my identity will not be disclosed in any report, article or any other material related to the study and will be known only to the researcher and her supervisor. Any direct quotations used in the study will only be identified by an allocated code and so will not be traceable to me.

I acknowledge that :

- The purpose of the study has been explained to me and that my input will only be for the purposes of the study
- My participation is entirely at my own discretion and that I can withdraw at any time
- I will not receive any material benefit as a result of my participation in the study
- Participation will not influence my employment or performance management in any way whatsoever
- I will be entitled to be informed of the results of the study

_____

_____

SIGNATURE – PARTICIPANT **DATE**

_____

_____

SIGNATURE – RESEARCHER **DATE**

ANNEXURE 4: PERMISSION TO TAPE/DIGITALLY RECORD DISCUSSIONS DURING FOCUS GROUPS

Dear Participant

I would like to request your permission to tape/digitally-record the focus group discussion that will be conducted with you. The reason for the recording is to ensure accuracy and reliability during the analysis of the research results. Your real name will not be used during the focus group and these records will not be given to anyone other than those involved in the study. I will destroy these records once they are no longer required to be used in this study.

Thank you

_____

Lesley Fletcher

I _____ (Print name in full) hereby grant permission for the focus group discussion to be taped/digitally recorded.

_____

_____

Signature – Participant Date

ANNEXURE 5: QUESTIONNAIRE – FOCUS GROUP – NURSES PRACTISING IN THE SELECTED MATERNITY UNITS

RESEARCH ON RECORDKEEPING BY NURSES

AN INTERVENTION TO IMPROVE RECORDKEEPING BY NURSES IN MATERNITY UNITS IN A PRIVATE HEALTHCARE FACILITY.

QUESTIONNAIRE TO BE USED FOR NURSES PRACTISING IN THE SELECTED MATERNITY UNITS

1. Why do you think nurses have difficulty, generally, in complying with requirements for good recordkeeping?

Probes: Could you tell me a bit more?

Why do you think that is the case?

Does this often happen?

2. Why do you think nurses have difficulty in complying to these aspects of record keeping?

Patient Assessment

- Baseline assessment data established on admission
- Critical indicators for care identified
- Re-assessment done

Nursing Care Programme

- Critical indicators prioritised in care plan
- Nursing care executed in line with priorities – actioned and recorded
- Patient education given and recorded
- Patient information given and recorded

Progress monitoring

- Nursing care evaluated (critical care indicators as well as progress)
- Nursing care plan updated where needed

Legal compliance

- Legible handwriting

ANNEXURE 6: EXAMPLE OF A TRANSCRIPTION OF ONE OF THE FOCUS GROUP MEETINGS

CERTIFICATE OF VERACITY

We, hereby certify that in as far as it is audible the aforegoing is a true and correct transcript of the recording provided by you in the matter:

(NAME OF AUDIO: 07.22.2016/07.09.40)

DATE COMPLETED	:	06/08/2016
NUMBER OF PAGES	:	18
PROOFREAD	:	√

Research interview dated 22nd July 2016

INTERVIEWER 1: If I could just give, you a little bit of background. One of the reasons that we're doing this research study is we found that nursing records are frequently not well kept. Even sometimes, when they are 'well kept' the things that are written are not necessarily very pertinent to the patient, so for example 'breathing on room air' if there is nothing wrong with the patient's lungs but one of the reasons we really want to look at record keeping is because very often litigation happens. When we get those records, and we want to try to defend nurses, there is nothing in the records that we can use to defend them, so we are looking at ways to improve record keeping and that is what the research is about, are we keeping records properly? We might find that we are actually, or do we need to do something else, in terms of record keeping? We want to ask a few questions and get your answers. I would like you to please, discuss anything and everything that you feel is relevant, in terms of record keeping.

INTERVIEWER 2: It's very important that it's your personal opinion. It doesn't matter whether it's acceptable or whether people will find it acceptable or not. That is not the issue. The issue is to find out the truth of what is actually happening and there may be very good reasons why this is happening and you might know them and nobody else does. That is what we want to try to find out.

INTERVIEWER 1: Thank you very much, so we're going to ask you questions and Dr Sue is going to also interrupt, if I don't ask the right questions or whatever. Okay, so generally speaking why do you think nurses have difficulty in adhering to record keeping standards?

INTERVIEWEE 1: I think in maternity especially, sometimes you are so busy in the morning and not even just sitting and writing. Even if you're sitting at your patient but then someone comes and calls you, then you have to go for a Caesar, so you actually have ten minutes to write and you have to get as much as possible into those ten minutes. Then you have to write five files. Then there's [block sheet take? 0:02:49.8] but then you have to write

everything in the report as well because they want you to tick the blocks but then they want you to repeat it in the report again. It takes time and its double work, so you get frustrated but when skip it, it is shown as bad record keeping.

INTERVIEWEE 2: Then when the patient wants your attention and you have to help with the baby then your record keeping is lacking because you'd rather have patient care than the reports. So do you rather write your records that everything is up to date or do you spend time with the patient who actually needs your help? That takes a lot of time.

INTERVIEWER 2: I'm just repeating it for the recording – she's saying and then when we're Afrikaans and we have to write it in English, which also makes it difficult, or whatever language.

INTERVIEWER 1: Okay, so it's not your first languages that you're writing the report in, okay, anything else.

INTERVIEWEE 1: What I also think, in the labour ward especially, is it's impossible to do a delivery and to record at the same time. What you do is you do the delivery and then you try to catch up with your paperwork. By then it's not so detailed because you forget about little things you do and usually we'll have a delivery at 17:00 or something, and then you're going home at 19:00, but then it's not as if the delivery is 17:00 you only get writing at maybe 18:30 and then you have to hand over. At the end, it happens that you write your report after 19:00. Then you want to go home because you're tired and you have to remember everything that you did because it is impossible to write, record, and to... I can't ask Tania to write a report while I catch the baby. It's too difficult, so I think it's time consuming, which is a problem also.

INTERVIEWER 2: Do I understand that the mid-wife, who is doing the delivery, is also responsible for doing the record keeping?

INTERVIEWEE 1: Yes.

INTERVIEWER 2: You can't delegate that.

INTERVIEWEE 1: If we can, it would be awesome. It would help.

INTERVIEWEE 3: For those things as well, specific to a labouring woman, the documentation I think would be easier if there is things, like you would have a session let's say in the maternal condition or [precondition? 0:05:26.8], general comments instead of just leaving it blank when you can just write '2-hourly' this is what happened. If you're specifically, there you can answer specifically two maternal foetal, which is specific to labour.

INTERVIEWER 1: Okay, so it's some sort of [inaudible 0:05:43.3] guideline.

INTERVIEWEE 4: Also, in the private sector they forget that maternity is like an emergency unit. It's a walk-in unit at any time, so they're understaffed because there is a little patient in the ward, then they come like this, "My water broke. I think I'm in labour," etcetera. Then you end up with minimum staff and too much patients. I remember a day that I had a patient walk in, in labour, while having four other patients that were struggling to breastfeed. I finally got to sit down for the first time to touch any paperwork at 16:00 that evening. How am I, at the end of that day, can you remember what you did on six patients? Obviously, there is going to be a lack of detail of what you did. Something important can slip through the cracks because we were busy and in demand. This is a demanding unit. You can sit at any given time for two hours with a patient, giving her emotional support, giving education, assisting with breastfeeding, and by the time you walk out of there you're exhausted but you have to go to the next patient and possibly go through the next hour talking. Then you have to come back, sit down, and write all that stuff...

INTERVIEWEE 1: Yes, and they don't just want you to write down health education given. You must actually write down the information but if I have to write all the information that I give to the mum, my book is going to be full in the first hour. So you can't, so you just write 'health education given' but they actually want to know what education was given and what did you tell her, if you want it as proof?

INTERVIEWEE 4: You cannot sit there writing now, while you're talking to the patient because then they're feeling that you're not giving them the 100%. If

you sit there and write and she's actually, needing emotional support, she will feel like 'this woman is not listening – she's too busy writing her stuff down'.

INTERVIEWER 1: Do you want to add anything?

INTERVIEWEE 1: Are you all right, Letsono?

INTERVIEWEE 5: Yes.

INTERVIEWER 1: Do you ever have any problems with record keeping?

INTERVIEWEE 5: Not really.

INTERVIEWER 1: Do you write in the reports?

INTERVIEWEE 5: Yes, I do.

INTERVIEWER 1: You do?

INTERVIEWEE 5: Yes, I write.

INTERVIEWER 1: Shorthand?

INTERVIEWEE 5: Because sometimes at night you've got eighteen patients. You are expecting that somebody is going to come and they haven't come. Then you've got to schedule in two of your [inaudible 0:08:32.2]. It is mothers and babies – something is going to come in, so what [inaudible 0:08:41.0 - 0:08:52.1] chart. What are you going to do when you've got eighteen or nineteen? That night they come back – [inaudible 0:09:02.7] you're going home at 19:00 and now it is 18:00 and you ask yourself 'where has the time gone'?

INTERVIEWEE 4: It's killing us because every night we leave at 21:00.

INTERVIEWER 1: Every night you leave at 21:00.

INTERVIEWEE 1: Yes, to catch up with the paperwork.

INTERVIEWEE 4: You can ask anyone we only leave, between 20:00 and 21:00 we only leave.

INTERVIEWER 2: Yes, because at 19:00, after you gave a report then the night staff takes the patients over and they can give the personal care to the patients, where you now have time to get up to speed with your reports.

INTERVIEWEE 4: Yes, and it's also not fair towards the next shift because they want to start their work and they want to see stuff. For example, if we sit until 21:00, we're being unfair to the night staff because they want to see is all the medication there and is everything ordered. If something slips during the crack during the day, so that they can quickly order before the pharmacy closes, so now you sit with the file, and writing. During the day they can't keep the file after their night shift and catch up with writing because the doctors come and do ward rounds. They want to see the files and see that the medication is given, and then the file is not written. It is crazy sometimes.

INTERVIEWEE 5: Sometimes there's a patient in casualty then you must go to casualty. You must go there with your [inaudible 0:10:19.8] and be with the patient in casualty, and deliver in casualty. You do everything in casualty. This customer has never seen the clinic and [inaudible 0:10:27.9].

INTERVIEWEE 4: Then two hours later you come to the ward and then patients is unattended. You have to sort out your patients and by the time you're done sorting out your patients – where was there time for writing? It is unfortunately, the truth of the situation.

INTERVIEWER 1: What would make it easier?

INTERVIEWER 2: It's clearly related to staffing issues.

INTERVIEWEE 4: Like Carien said, it's crazy. They're making these blocks for us to do tick, to make it easier and [inaudible 0:11:07.3] you tick but now they want you to write into the [card? 0:11:13.3] as well. To see if there's no inflammation, so why do we do double work? In the mornings you actually have to see that chart, it's crazy. You take a whole half-an-hour just to do all the ticks, just so that you can go and rewrite everything, whereas with the previous paperwork you could just start writing X, Y, and Z.

INTERVIEWEE 6: With the ticking of the blocks – you have to remind me where to start writing then I could write it.

INTERVIEWER 1: So you like the ticking of the blocks?

INTERVIEWEE 6: [Inaudible 0:11:57.7]

INTERVIEWER 2: Was it different at the other hospital because there's just...?

INTERVIEWEE 6: No, it's the same thing, otherwise.

INTERVIEWER 2: So it's just a personal preference. You like the ticks.

INTERVIEWEE 6: The blocks can work but it must be more effectively implemented. There is a way to make it easier.

INTERVIEWEE 1: Yes, maybe like a block but there's a description space, so if you have an IV and C2 and next to it, there's a space to say 'no swelling' and 'no inflammation'. That's it, so you don't have to write it over again. Then in the report, you can rather write just basic stuff.

INTERVIEWEE 2: Yes, but in maternity...

INTERVIEWEE 1: You can actually have a box for everything because you can have the uterus, you can have the breast, you can have the nipples, and you can have the wound. You can have absolutely everything. Instead then, in your report, you can just write about your wound care – what plasters you used, what method you used to clean it, and stuff like that. The wound is still there and we know it is dry and healthy. You don't have to rewrite it again, end of story. I think it will be more time consuming.

INTERVIEWEE 4: Yes, and also they've changed the book as well, where now, in the previous books, the observations and everything about the uterus and nipples, and breast care was under there. Now, they've made it on a completely different page. Now, it gets forgotten because it's hidden at the back. There's the postnatal, and you normally have the observations right at the back and the doctors don't like that because when they come and see the patients the first thing they want to see is the observations, so they expect it to be more in the front, like the previous books were. Now here you have all your block ticking and then you start writing here, and I find that this space is not sufficient for everything you need to write.

INTERVIEWEE 1: If you can use the block as proof...

INTERVIEWEE 4: More compact and much shorter, yes.

INTERVIEWEE 1: Yes, then that would be enough space to write, if I don't have to repeat everything that I've ticked in the block.

INTERVIEWER 1: So either have the blocks, and only the blocks and the report, so that you don't have to repeat what the blocks say or leave the blocks out completely and just have a report but don't have both.

INTERVIEWEE 1: Yes.

INTERVIEWEE 4: Then you've got this lonely, little page here at the back, so here's your notes for today now. Well, so you start on day one. Now you have to remember to go back here to do your daily postnatal assesment where previously it was all underneath here, so you see it, you do it, and it's a more comprehensive assessment – where that is now wondering where what is in this book?

INTERVIEWER 1: Okay.

INTERVIEWEE 4: Then you see like this one you have to add in. It's not included in the book. Especially, for me, a problem with the labourer, I worked in Government before, so here they only have vital data on admission. Then you have your cartogram and that's it. Now, with a patient that's being induced they don't go the normal routine or normal hours.

INTERVIEWEE 1: But they go on the cartogram [inaudible 0:15:20.5].

INTERVIEWEE 4: So you cannot go onto the cartogram. What happens to all your observations being done? You cannot necessarily record it in your observations. Let me just show you. This is what you've got, one little page like this. There is no way you can write a labour on that. Then you have to stick in more pages, which is also time-consuming, so you sit there in the labour ward and then I have to walk all the way to get cellotape to stick it in.

INTERVIEWER 1: So there's a lot of things that's wrong with this.

INTERVIEWEE 1: Yes.

INTERVIEWEE 4: With Government, we had a latent faced block where they say every four hours that you have observations PV and where you can write it in the blocks. I think that is definitely short in this book, for monitoring latent faced labour.

INTERVIEWER 1: How would you compare the Government record with this record? Was it easier to use?

INTERVIEWEE 1: Yes.

INTERVIEWEE 4: It's much easier to use.

INTERVIEWEE 1: I think for me as well, and I can see with the new girls we appointed. The biggest challenge starting to work in private is the paperwork. They were... I remember Sister Mukete, one of the other sisters but she's gone now. She actually took a book home to just go and try and see where what is, and she actually studied the book just to be able to fill it in.

INTERVIEWEE 2: I think there it was more setup. Like she said foetal assessment... It is more set up, and you know where to go and it's more patient orientated. Like if the patient is in latent phase there is spaces to write for latent phase. If the patient is in active, then there's more space for us to write.

INTERVIEWEE 4: I find that there's lots of repetition. For example, here doctor called – yes. Here you write 'who's your obstetrician', so you write your doctor's name. Then they say 'doctor called – yes'. Doctor's name, so why would you call another doctor if it were that doctor? There is so much repetition where I feel they could just once have written that and then it's done.

INTERVIEWER 1: Thank you. Can I ask a question that's not easy? When you do your patient document audits are you all involved in the patient document audit? What do you think of your records, of the records that you keep here in the ward?

INTERVIEWEE 5: It must be clear [inaudible 0:17:48.4].

INTERVIEWER 1: It must be clear.

INTERVIEWEE 1: Yes, we've had a few issues with the handwriting.

INTERVIEWEE 4: You can clearly see also, in the different handwritings that this one was clearly in a hurry.

INTERVIEWER 1: And the actual report of the patient's? The labour is all there but the post-delivery.

INTERVIEWEE 1: It's usually not too bad though. Usually the thing that we had to change with the pain score or the effective medication, so after an hour you'll write 'pain medication was effective' and stuff like that. Otherwise, it's usually because I think with us it's easy. You go with a story because it's a mum, so you start with 'is she alert and calm – is she emotional or is she depressed' and then you can go to the boobs and then the wound and then the uterus. I think our record keeping is not too bad.

INTERVIEWEE 4: It is just the stuff that we're forced to do according to the hospital standards and that is where the staff struggled but they want specific stuff.

INTERVIEWER 1: Such as?

INTERVIEWEE 4: Like you need to say, 'catheter is secure'. They want to have the word 'secured' in. They want to see that you've written in the file that 'IV has no sign of inflammation and it's not tissued' or whatever, but they want specific words, so she might write it but in her own wording but then they say that we're none compliant because it's not the words that they want.

INTERVIEWER 2: How do you know what they want?

INTERVIEWEE 4: Upstairs they do lots of [inaudible 0:19:50.4] and then they say, "Okay, but this is what we want." They give us feedback.

INTERVIEWEE 1: Yes, they do what we are doing currently in the ward, and which one is retrospective, and then Lucy will come back and tell us 'okay they said this'. The thing is that it is also different people auditing, so they're not reading your whole report. They're looking for key words, and then they tell us but we didn't do infection or infection control because we didn't write

‘the drip was secured and there’s no signs of inflammation or swelling’. I think...

INTERVIEWEE 4: But then it does go back to this page because always my admission to postnatal I would write here ‘IV fluid – yes’, ‘patent – yes’, ‘side right hand’, and then I will write ‘no sign of inflammation’. Then I don’t have to write it here again. It’s good because then I remember if I see that and I tick and I know that it’s written but then they don’t see it here and they think... Even though I write there, ‘postnatal observation is done – see page 9’ they don’t see the words there. It’s not compliant.

INTERVIEWER 2: Okay, so you only get this feedback after an audit is done. Are there any guidelines given to you about how to write it before you come or before you start or when you start working?

INTERVIEWEE 6: They try but they change so much as well. Over the years, it’s crazy to... One year they say ‘let’s do this’ but then they change it to this. You can’t keep up to date of what exactly they want.

INTERVIEWEE 1: Yes, but they don’t [inaudible 0:21:23.6] because if you have to write according to [inaudible 0:21:28.5] then you’re going to write an extra few hours.

INTERVIEWER 2: So what they say after an audit does that differ with what you were actually instructed to do or is that part of the change?

INTERVIEWEE 1: Yes.

INTERVIEWER 2: Part of the changes that are made.

INTERVIEWEE 1: Yes, that’s usually where the change also starts coming from.

INTERVIEWEE 4: Yes, they say, ‘okay this is not working, so let’s...’ So we’re doing this hopping thing and then the people that is here longer they don’t know whether they’re coming or going.

INTERVIEWEE 1: Yes, because the pain score wasn’t such a big thing but then all of a sudden, about two months ago, it boomed like everybody must start using the pain score, out of four and it was like heavy.

INTERVIEWEE 2: Like you can't just say that, the patient was in pain. You had to say that the patient is in pain, she reports that the pain score is one out of four.

INTERVIEWER 1: For labour pain as well.

INTERVIEWEE 1: Yes.

INTERVIEWEE 4: This is so unnecessary and I feel it is totally, because not everyone experiences pain on a scale. I can say it's a stabbing pain and it's not so painful but it's stabbing.

INTERVIEWEE 1: Like pure contractions, it comes and goes.

INTERVIEWEE 4: Then why can't you write that? Why do you have to put a score?

INTERVIEWEE 5: Some people will tell you that they don't have pain at all. They'll say 'we have a high threshold', so you can't write that because you must have this score.

INTERVIEWER 1: So what do you write, zero out of four?

INTERVIEWEE 5: We write 'very high threshold'.

INTERVIEWEE 4: Yes, and I'm also old school like that. I want to write a story and not just a score because it feels like you take the patient out of the equation about what the patient says.

INTERVIEWER 2: Do you use the same pain score or are you required to use the same pain score here, as you do in the general wards?

INTERVIEWEE 4: Yes.

INTERVIEWER 2: So things like antenatal preparation that would affect your perception of pain.

INTERVIEWEE 1: Yes.

INTERVIEWEE 4: Even this, a while back they said 'no, everyone must do the pain score – it's out of ten'. Then, okay no, we're doing pain score now

but it's out of five now. Okay no, we're doing a new pain score now, and it is out of four, so people are sitting confused.

INTERVIEWEE 1: I agree with you because the mum is emotional, so the pain is going to be much worse than a normal pain, so if a one out of four in the medical ward is a headache. Our one out of four here, maybe our mum will have three out of four, even though she has a one out of four, but she's emotional, she's stressed, the baby is not right so maybe she's worried about that, so it makes the pain much worse because there's a lot of other factors that influences pain. With contractions, it's different because it's ten out of four and then it's a zero out of four, but yes.

INTERVIEWER 1: Your baseline assessment – I know that you've also got the tick form for the baseline assessment. How do you find that? Do you think that our baseline assessment is satisfactory? Do you think we really identify the critical indicators for care?

INTERVIEWEE 1: It does tick everything but I think it's too general. It's the same as the other wards. If I can say, it is too much hospitalised. Our mums differ. Like with us you get cracked nipples or bleeding nipples, but sometimes it's just a red nipple and it's really sore but then it's difficult to tick because you can say the nipple is red but you still have to treat it and you still have to do everything. You can't just tick a 'red nipple' and go on with it, so again you have to do a baseline assessment but you have to take it back to the paperwork to explain where it's coming from. Even though I don't even think, we have nipples in there.

INTERVIEWEE 4: It's not here, so again you miss it because there's nothing. You forget to go to the back to say okay 'nipples flat – normal inverted cracked'.

INTERVIEWEE 1: This is very general. It's more like a general, surgical patient. Yes, but what about a red nipple that's been sucked on for two days, so...?

INTERVIEWEE 4: So with your baseline assessment do you mean this one?

INTERVIEWER 1: Well, baseline where, on your patient's admission and then there's a repeat, a daily repeat or even every night a repeat of the assessment. I think you've said it's quite generic.

INTERVIEWEE 1: Yes, it's like... I think you can make it more specific on a labour patient.

INTERVIEWER 1: Does that affect your record keeping that generic assessment?

INTERVIEWEE 6: Yes, I think it binds you it puts you in a block and they just want you to function in this box and in maternity, you cannot. You have to think outside of the box. You have to consider the patient much more holistic.

INTERVIEWEE 2: It's then time consuming because you have to do the baseline assessment but it's not really specific to maternity, so then you have to write everything in the report, so that's where the time consuming comes. You have to do the ticks but it's not really relevant to the patient, and then you have to write everything in the report, so that takes a lot of time.

INTERVIEWER 1: So you write everything that you know the mid-wife ought to be added to this report, after you've done the baselines.

INTERVIEWEE 1: Mostly, yes.

INTERVIEWER 1: Your nursing care plans for every day. How do you prioritise the problems? Your patient has delivered and now you're going to do a daily care plan, and a progress report. How do you prioritise those problems or are they generic problems?

INTERVIEWEE 1: No, I think it's actually different. What I usually did or what I did when I had my patients, because I'm more in the admin or whatever. I do Caesars and everything but I don't take a patient a day or look after the patient any more. What I used to do is you do your own, the first report you write you go through the whole mum, so then you're going to look at the boobs. You're going to look at the perineum, is she [inaudible 0:27:38.3] – you're going to do everything and then you're going to identify what is abnormal. Let's say you're going to see the perineum and you're going to say

the perineum is swollen, maybe signs of inflammation. Then later you're going to say that's your problem, so then you're going to address it again, like at 09:00 the infrared light must be put on to prevent etcetera. For me, I skip the whole thing, the UT, and everything and then go back to my first report that I've written, to report any abnormalities.

INTERVIEWER 2: Then you're relying on what your clinical assessment was, or hopefully you prioritise not according to the record but according to your own knowledge.

INTERVIEWEE 1: Yes, and again because if I see my mum has red nipples. If I just tick, 'red nipples' it's not going to be sufficient. You have to go somewhere and see that it was a problem but you have to do something about it as well, so you've got to report it again, later in your notes or get a [inaudible 0:28:35.3] or something.

INTERVIEWER 1: How often in the day, do you write your records? Do you have to update your records in the day or is it routine? Do you do it day/night? What happens in terms of updating records?

INTERVIEWEE 2: Normally when it's handover... In the mornings, when you come in, like she said you have your baseline report of you've just seen the patient. Especially now, if it is change of shift and you don't know the patient, so then you obviously start assessing. Then you continue throughout the day, whenever you've done something or given education or if she was reporting, pain and you gave pain medication, so it's continuously, throughout the day. Whenever you go into the room and you work with mum then you write it down.

INTERVIEWEE 1: Yes, whenever you breastfeed you see.

INTERVIEWER 1: And night duty, how often do you assess the patient or do you write it in the morning?

INTERVIEWEE 5: Its [inaudible 0:29:57.9] go and assess the patient [inaudible 0:30:03.6 - 0:30:19.2].

INTERVIEWER 2: So you make records every time you have patient interaction – it's not specifically twice a day or twice a night?

INTERVIEWEE 5: [Inaudible 0:30:38.6] breastfeed [inaudible 0:30:42.2] you've got to be there to see to it, and that kind of thing. If the nipple is red or painful, to try and use this side – you say that this baby must be hungry. I'm taking the baby so that you're going to [inaudible 0:31:01.8] then it's time to take that baby [inaudible 0:31:12.8 - 0:31:19.7].

INTERVIEWEE 1: There's not a specific time, you're right, but there is a routine in the day especially. In the night, it's a bit different but in the day it's usually, you take over the patient. The doctor's round, the breakfast, then you'll go for wound care, then you breastfeed a few times in between, then it's lunch, pain medication, afternoon is visitors, and then it's pain medication again – and then the turnover. There is a routine that you have but it's not specific that every three hours you have to write in the report. You write as you interact but there is a pattern.

INTERVIEWER 1: What information is used for handover? Is it a summary of the whole day or the whole night or what do you actually use as a prompt for handover?

INTERVIEWEE 1: Usually the main focus things, if there's no complications she'll just say the basic stuff – 'the mum had a Caesar, she's doing fine, the wound is clean, she's breastfeeding well, she needs some help here or there' but if there's a complicated patient or if there has been complications – then you'll explain the whole story.

INTERVIEWER 1: Handwriting – how do you address illegible handwriting or do you find that it should be addressed? Do you find that sometimes the handwriting is illegible? There's lots of nods of heads here. What about on your documents, where it says 'initials or print your name and write'. Do you find that that becomes or does that pass your audits every time?

INTERVIEWEE 4: Usually all of us is very good with giving their sample signatures, so that helps because if they sign and you can't make out the

signature, (all of them have the sample signature). They are very good with that but in the report... Sometimes you struggle to read what they did.

INTERVIEWER 2: Is there any way that you can think of in improving that problem?

INTERVIEWEE 6: I think that's the solution. I just attended Mrs So-and-so; I did this, and this. Technology is so advanced now that I understand that if you do it via the internet it will automatically go into system that goes over to words, so I think that would take nursing to the next level.

INTERVIEWEE 2: I think it's also less time consuming because to sit down and write, where now you can quickly walk to the tearoom and have a sip of coffee but still say what you did, so that...

INTERVIEWER 1: What do you think about that idea?

INTERVIEWEE 4: [Inaudible 0:34:14.1]

INTERVIEWEE 1: I think technology has vastly improved, so we should too.

INTERVIEWER 1: The rest of you – using technology, either typing or a voice recording – what do you think?

INTERVIEWEE 5: Much easier.

INTERVIEWER 1: Voice would be lovely.

INTERVIEWER 2: You would love it.

INTERVIEWEE 6: I have a terrible handwriting. From grade one, I got [inaudible 0:34:46.6] my handwriting was not readable and I could not write, and as until today I can't write properly. Some things are [inaudible 0:35:00.9]. It's not that you don't want to fix it...

INTERVIEWER 1: No, it's just that some people don't write nicely.

INTERVIEWEE 1: If you're going to try to write nicely, you're going to take another hour to write your report.

INTERVIEWEE 6: Then you add time consuming and you're actually climbing into someone's character, to say that you, as a person is not good enough, so better yourself. Is that really fair?

INTERVIEWER 1: May I answer that?

INTERVIEWEE 2: Let's say for example, if I do a delivery. I've got a [inaudible 0:35:33.8] that I write and it covers everything. If I do admissions – I've got a song that I write and it covers everything. The same when we come here and we've got these boxes to tick and we've got to write it here, and we're repeating ourselves ten times, so we are unique and my song covers everything and I'm happy with it and I know it.

INTERVIEWER 2: Then you know you're not missing anything if you do it?

INTERVIEWEE 2: Yes, I know I'm covering all the important things and then suddenly when you start ticking there and there, then it is confusing again.

INTERVIEWER 2: When you say 'song' is it like a harmonic, something that reminds you...?

INTERVIEWEE 2: No, it's just something I've written so many times before and you're just so used to it and it just covers all the [inaudible 0:36:12.2] of the mum and the baby, everything, so you're covered completely.

INTERVIEWER 1: So you're walking around with this template for a record in your head, based on experience.

INTERVIEWEE 2: Yes.

INTERVIEWEE 4: I find that, and I don't know if I'm the only one but I find with a baby, to write now at 19:00 was handed over, this time seen by the doctor. This time 'they' and 'that', where maybe just one conclusion at the end of the day would have been sufficient. To say, 'this is what I did the whole day with this baby' and not necessarily what kind of work...

INTERVIEWEE 1: Yes, but also like having a full book for a baby, for me, is unnecessary. Our babies are fine. If the baby is sick they either go to ICU in a split second, or then you can create a book for a baby that needs more observations or better care, but like I said usually our babies... If they are a

bit sick, grouting, or anything, it will be for two hours and then they're perfectly fine after that, or they will end up in ICU. Having a full book for a baby is unnecessary. In Government, we had the mum story for the postnatal check-up and then just a little block next to it to say how the baby is doing. The baby is breastfeeding; he's sleeping and breathing very well. The baby has passed urine...

INTERVIEWEE 4: The baby is a healthy patient. It's not like a mum that had an operation or a Caesar. It's a new-born but it's healthy and functioning, it's feeding, so you can just write about the feeds, just to make sure and that the baby [inaudible 0:37:47.7] and urine and you make sure that is going on, but that's it. There may be a space for a bath but also, we don't bath babies anymore.

INTERVIEWER 1: Do you not bath the babies at all until they go home?

INTERVIEWEE 1: If it's a [inaudible 0:37:59.1] we'll do it on the last day, just to show them how but if it's a multi-baby then she can bath the baby at home.

INTERVIEWEE 2: If it's a healthy baby then, I repeat myself, every Tuesday I'd write because if the baby is fine and the most important thing is the feeding and there is a different page for feeding, and that's where you write – baby fed at 12:00 and then at 14:00 or whatever. If you have to write a report, you say the same thing over again. The [inaudible 0:38:30.0] – the cord is...

INTERVIEWEE 4: Yes, you just write stuff to put something down.

INTERVIEWEE 2: Yes, because you don't want to write at 19:00 because it feels like you haven't attended to the baby but you have. There's nothing really new to write, so you write the same thing over.

INTERVIEWEE 6: If you check the baby's book that would probably be the most nonsense written because you just have to write, to write something at the end of the day. Like [inaudible 0:38:58.1] said, 'breathing in room air'. That's typically, where you find [inaudible 0:39:03.3].

INTERVIEWEE 1: The first page is for the Caesar, the up-grow – that's fine and perfect because we have to have that but then it needs to be a page for

the feeding blocks for every day that they're in the hospital and one page, where you can write 'if something happened'. Like if, the baby had a bath, then you can write a little story about the bath, with the date and the time, but it's not to say that you have to handover that day. Every time in the day that something happens you can write it in, even if it's a different day, it is just time and key for what you're focussed on, and to have proof of it.

INTERVIEWER 2: Is there anything else anyone wants to add about how we can fix and improve the record keeping?

INTERVIEWER 1: It's important. Your opinions are very important.

INTERVIEWEE 2: I think if they also had, this probably goes back to in-service training, but I haven't been here long enough to know how often or how those things work. If there was certain things then this is what you write for X, Y, and Z… If your patient has this or has pain, this is how you write it. How often you must check on some things because I haven't been here long enough to know when you guys actually do it, but you asked earlier on when we are employed here do we get taught?

INTERVIEWEE 4: I agree with Olivia – they don't spend enough training on what the expectation is and exactly what they want.

INTERVIEWER 1: In terms of record keeping?

INTERVIEWEE 1: Yes, because they're supposed to do it in the orientation but they do it for half a day and that's it.

INTERVIEWEE 2: When I had to write a report I honestly went back to the previous patient, and saw, what everyone else wrote and what am I looking at for this situation. They you've just got to put them together and say well maybe this is what they want.

INTERVIEWEE 3: Then feedback because I haven't been here long either, so then you're writing but you don't know whether what I'm writing correct or do they want more or less. Now I'm just continuing but I still have doubts – is it fine? I'm continuing but I don't know.

INTERVIEWEE 2: We have had on two occasions, where a manager has said that you've done this right. This is 100% - thank you very much but that is on one or two occasions.

INTERVIEWEE 6: They spend too little time on this and actually, going to the training centre and really discussing in depth what they want. Then they do assessments up there and then they say, 'no but this is not right' then the clinical tutor comes down and says, 'this is not done right' or 'this is not done' then it's more like a tax session than actually a teaching session.

INTERVIEWEE 1: Also, I think in orientation, you guys don't do our files, right?

INTERVIEWEE 2: No.

INTERVIEWEE 1: You do the hospital paperwork, which is also... Yes, like even with us when we got the new books it was just given and we started filling in whatever we wanted or what we thought must be filled in, and that's how we've carried it onto them. We thought this is right, so you can continue, so there's no guideline or a manual how to use the book.

INTERVIEWEE 6: I remember the other day they had a go at our nurses for [inaudible 0:42:18.8] chart because they said it must be done this way and this poor lady has been doing it a certain way for ten years, and now all of a sudden they come and say it's wrong. You must do it like this, I mean... It's crazy.

INTERVIEWER 1: Is there anything else that anybody would like to add?

INTERVIEWEE 6: Yes, so even the [inaudible 0:42:59.2] chart has changed and I think is different necessarily wrong? Like that nurse, I totally understand what she said. I don't feel the way she's been doing it was wrong but they expected her now to do it a different way, so can we not give a little bit of leeway and say, 'okay I see you do it differently – it still makes sense to me, so that's fine continue that way'. Than rather putting it in a box and saying, 'you have to do it this way'.

INTERVIEWER 1: Thank you very much ladies, especially the night staff, for staying. I can see you're very tired and please, you've got to have a muffin at least, or something before you go.

ANNEXURE 7: INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES – NURSING PRACTICE

P O Box 1755
Ruimsig
1739
Date to be inserted

Participant name and address to be inserted

Dear ……

INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES

I will be conducting nursing related research for degree purposes in the maternity unit of two large hospitals in a private healthcare group. The title of the research is *An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The study requires opinions by registered nurses who are considered experts in their fields (at least a Master's degree in nursing and a minimum of 10 years experience in the field of speciality). Opinions will be garnered through the use of the nominal group technique. As an expert in the field of nursing practice I would like to request your participation in the group. I will be asking your opinions on content that should be included in an audit document to make it more reliable in measuring standards of nursing care as reflected in patient documentation. I will also be asking for your opinion on the content that should be included in an intervention to improve the standards of recordkeeping by nurses.

The group discussions will be recorded and a verbatim transcription will be used to analyse the content of the discussion. You will be asked not to discuss proceedings outside the group but you will not remain anonymous within the group. Your identity will not be revealed in the study. All your contributions will be coded so that identities will only be known to the researcher and her supervisor. Any direct quotations used in

the study will only be identified by the allocated code so will not be traceable to you or any other individual.

Raw data will be destroyed two years after publication of an article on the research study.

Please be informed that:

- Participation is entirely voluntary and at your own discretion and that you can refuse to participate or you may withdraw at any time
- You will not receive any material benefit as a result of your participation in the study
- You will be informed of the outcome of the study if you so wish

Should you agree to participate, you will be requested to complete a consent form for participation as well as one giving permission for group discussions to be taped/digitally recorded. This is a requirement by the ethical committee of the university before granting ethical clearance for the study.

Should you have any questions about your rights as a study participant, or questions or concerns about any aspects of this study, please call the Ethics Department of the University of the Witwatersrand on +27 11 717 1234 or my supervisor, Dr Sue Armstrong at 011 488 3094.

I thank you for agreeing to consider participating in the study.

Yours Sincerely

Lesley Fletcher

ANNEXURE 8: INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES – ETHICAL AND LEGAL

P O Box 1755
Ruimsig
1739
Date to be inserted

Participant name and address to be inserted

Dear ……

INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES

I will be conducting nursing related research for degree purposes in the maternity unit of two large hospitals in a private healthcare group. The title of the research is *An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The research questions focus on the reasons for non-compliance to recordkeeping standards by nurses and whether or not a valid audit tool that reflects the actual standard of care by nurses can be used to design an intervention that will improve compliance to recordkeeping standards.

The study requires opinions by registered nurses who are considered experts in their fields (at least a Master's degree in nursing and a minimum of 10 years experience in the field of speciality). Opinions will be garnered through the use of the nominal group technique. As an expert in the field of nursing ethics and legal matters I would like to request your participation in the group. I will be asking your opinions on content that should be included in an audit document to make it more reliable in measuring standards of nursing care as reflected in patient documentation. I will also be asking for your opinion on the content that should be included in an intervention to improve the standards of recordkeeping by nurses.

The group discussions will be recorded and a verbatim transcription will be used to analyse the content of the discussion. You will be asked not to discuss proceedings outside the group but you will not remain anonymous within the group. Your identity will not be revealed in the study. All your contributions will be coded so that identities will only be known to the researcher and her supervisor. Any direct quotations used in the study will only be identified by the allocated code so will not be traceable to you or any other individual.

Raw data will be destroyed two years after publication of an article on the research study.

Please be informed that:

- Participation is entirely voluntary and at your own discretion and that you can refuse to participate or you may withdraw at any time
- You will not receive any material benefit as a result of your participation in the study
- You will be informed of the outcome of the study if you so wish

Should you agree to participate, you will be requested to complete a consent form for participation as well as one giving permission for group discussions to be taped/digitally recorded. This is a requirement by the ethical committee of the university before granting ethical clearance for the study.

Should you have any questions about your rights as a study participant, or questions or concerns about any aspects of this study, please call the Ethics Department of the University of the Witwatersrand on +27 11 717 1234 or my supervisor, Dr Sue Armstrong at 011 488 3094.

I thank you for agreeing to consider participating in the study.

Yours Sincerely

Lesley Fletcher

ANNEXURE 9: INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES – NURSING EDUCATION

P O Box 1755
Ruimsig
1739
Date to be inserted

Participant name and address to be inserted

Dear ……

INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES

I will be conducting nursing related research for degree purposes in the maternity unit of two large hospitals in a private healthcare group. The title of the research is *An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The study requires opinions by registered nurses who are considered experts in their fields (at least a Master's degree in nursing and a minimum of 10 years experience in the field of speciality). Opinions will be garnered through the use of the nominal group technique. As an expert in the field of nursing education I would like to request your participation in the group. I will be asking your opinions on content that should be included in an audit document to make it more reliable in measuring standards of nursing care as reflected in patient documentation. I will also be asking for your opinion on the content that should be included in an intervention to improve the standards of recordkeeping by nurses.

The group discussions will be recorded and a verbatim transcription will be used to analyse the content of the discussion. You will be asked not to discuss proceedings outside the group but you will not remain anonymous within the group. Your identity will not be revealed in the study. All your contributions will be coded so that identities will only be known to the researcher and her supervisor. Any direct quotations used in

the study will only be identified by the allocated code so will not be traceable to you or any other individual.

Raw data will be destroyed two years after publication of an article on the research study.

Please be informed that:

- Participation is voluntary and entirely at your own discretion and that you can refuse to participate or you may withdraw at any time
- You will not receive any material benefit as a result of your participation in the study
- You will be informed of the outcome of the study if you so wish

Should you agree to participate, you will be requested to complete a consent form for participation as well as one giving permission for group discussions to be taped/digitally recorded. This is a requirement by the ethical committee of the university before granting ethical clearance for the study.

Should you have any questions about your rights as a study participant, or questions or concerns about any aspects of this study, please call the Ethics Department of the University of the Witwatersrand on +27 11 717 1234 or my supervisor, Dr Sue Armstrong at 011 488 3094.

I thank you for agreeing to consider participating in the study.

Yours Sincerely

Lesley Fletcher

ANNEXURE 10: INFORMED CONSENT – EXPERT GROUP

AN INTERVENTION TO IMPROVE RECORDKEEPING BY NURSES IN MATERNITY UNITS IN A PRIVATE HEALTHCARE FACILITY

INFORMED CONSENT

I _____ (print name in full) hereby consent to participate in group discussions using the nominal group technique. Discussions will focus on:

- Obtaining expert opinion on data gathered in an audit of recordkeeping by nurses in the maternity wards of two hospitals of a private healthcare group
- The content that should be considered in refining an audit tool that will reflect the actual standard of nursing care
- The content that should be included in an intervention to improve the quality of recordkeeping by nurses

I understand that the discussions will be recorded and a verbatim transcription will be made. I understand that even if my name is mentioned during the discussions, my identity will not be disclosed in any report, article or any other material related to the study and will be known only to the researcher and her supervisor. Any direct quotations used in the study will only be identified by an allocated code and so will not be traceable to me.

I acknowledge that :

- The purpose of the study has been explained to me and that my input will only be for the purposes of the study
- My participation is entirely voluntary, at my own discretion and that I can withdraw at any time
- I will not receive any material benefit as a result of my participation in the study
- I will be entitled to be informed of the results of the study

_____ _____

SIGNATURE – PARTICIPANT **DATE**

_____ _____

SIGNATURE – RESEARCHER **DATE**

ANNEXURE 11: INFORMATION LETTER AND INFORMED CONSENT – DELPHI GROUP

P O Box 1755
Ruimsig
1739
3rd August 2018

Dear ……..

INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES

I am conducting nursing related research for degree purposes in the maternity unit of two large hospitals in a private healthcare group. The title of the research is *A quality assurance intervention for auditing of nursing records in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The study requires opinions by registered midwives who have a Master's degree in nursing. Opinions will be garnered through using the Delphi Technique. I would like to request your participation by asking your opinions on content that should be included in an audit document to make it more reliable in measuring standards of nursing care as reflected in patient documentation

The questionnaire will be administered via e-mail. You will be asked return the questionnaire/s within certain timeframes. Your responses will be anonymous but will be used in future iterations of the questionnaire if necessary. All your contributions will be coded so that identities will only be known to the researcher and her supervisor. Any direct quotations used in the study will only be identified by the allocated code so will not be traceable to you or any other individual.

Raw data will be destroyed two years after publication of an article on the research study.

Please be informed that:

- Participation is voluntary and entirely at your own discretion and that you can refuse to participate or you may withdraw at any time
- You will not receive any material benefit as a result of your participation in the study
- You will be informed of the outcome of the study if you so wish

Should you agree to participate, completion of the questionnaire will be considered as consent.

Should you have any questions about your rights as a study participant, or questions or concerns about any aspects of this study, please call the Ethics Department of the University of the Witwatersrand on +27 11 717 1234 or my supervisor, Dr Sue Armstrong at 011 488 3094.
I thank you for agreeing to consider participating in the study.

Yours Sincerely

Lesley Fletcher

Contact Details:

[redacted]

ANNEXURE 12: DELPHI TECHNIQUE QUESTIONNAIRE – ROUND 1

DELPHI TECHNIQUE QUESTIONNAIRE

SECTION 1: ELEMENTS OF MEASUREMENT OF THE QUALITY OF NURSING CARE

1 A COMPREHENSIVE AUDIT TOOL FOR MEASURING THE QUALITY OF CARE PROVIDED IN A MATERNITY UNIT SHOULD ACCOMMODATE ASSESSMENT OF THE QUALITY OF:

Element	Agree	Disagree	Please elaborate / comment / provide opinion
Ante natal care - mother			
Ante natal care - foetus			
Intra partum care - mother			
Intra partum care – foetus			
Post natal care - mother			
Post natal care – baby			
Inter and intra aspects of care – mother and baby			

2 AN AUDIT TOOL FOR MATERNITY RECORDS BY NURSES SHOULD PROVIDE EVIDENCE OF:

Element	Agree	Disagree	Please elaborate / comment / provide opinion
Clinical judgement (See below for explanation)			

2.1 CLINICAL JUDGEMENT REFERS TO:

Sub-element	Agree	Disagree	Please elaborate / comment / provide opinion
Comprehensive assessment of mother and foetus			
Planning of appropriate interventions based on findings			
Monitoring / evaluation of responses to interventions			
Clinical decision-making regarding the need for additional / amended nursing intervention			

Clinical decision-making regarding the need for medical intervention			

3 THE ELEMENTS THAT SHOULD BE MEASURED UNDER COMPREHENSIVE ASSESSMENT OF THE MOTHER AND THE FOETUS DURING THE ANTE NATAL PERIOD ARE :

Element	**Agree**	**Disagree**	**Please elaborate / comment / provide opinion**
Physical ante natal examination including a general physical examination with specific emphasis on factors which influence the outcome of pregnancy and labour such as anaemia, hypertension and Diabetes			
Abdominal examination including inspection and palpation			
Vaginal examination including inspection			

and where necessary, digital examination.			
Assessment of foetal well-being including estimated size for gestational period and foetal heart rate.			

4 THE ELEMENTS THAT SHOULD BE MEASURED UNDER COMPREHENSIVE ASSESSMENT OF THE MOTHER AND THE FOETUS DURING THE INTRA PARTUM PERIOD ARE :

Element	**Agree**	**Disagree**	**Please elaborate / comment / provide opinion**
Evidence of monitoring of the progress of labour using appropriate tools at appropriate times (tocograph, partogram)			
Evidence of monitoring of the foetal wellbeing using appropriate tools at appropriate times (tocograph, partogram)			

Element	Agree	Disagree	Please elaborate / comment / provide opinion
Evidence of a comprehensive assessment of the newborn			
Evidence of the implementation of “baby safe hospital” principles (skin to skin, latching)			

5 THE ELEMENTS THAT SHOULD BE MEASURED UNDER COMPREHENSIVE ASSESSMENT OF THE MOTHER AND THE FOETUS DURING THE POST PARTUM PERIOD ARE :

Element	Agree	Disagree	Please elaborate / comment / provide opinion
Maternal healing (caesarean section, perineal lacerations)			
Physiological responses to puerperium			
Evidence of appropriate care of the baby (passage of meconium, urine, immunisation)			

6 THE ELEMENTS THAT SHOULD BE MEASURED UNDER INTRA AND INTERPERSONAL ASEPCTS OF CARE ARE :

Element	Agree	Disagree	Please elaborate / comment / provide opinion
Interaction between nursing staff and healthcare professionals:			
Interaction between nursing staff and mother:			
Interaction between mother and baby:			

6.1 INTERACTION BETWEEN NURSING STAFF AND MOTHER REFERS TO:

Sub-element	Agree	Disagree	Please elaborate / comment / provide opinion
Patient satisfaction			
Emotional status			
Health education			
Social / personal issues			
Authenticity of recording			

6.2 INTERACTION BETWEEN NURSING STAFF AND HEALTHCARE PROFESSIONALS REFERS TO:

Sub-element	Agree	Disagree	Please elaborate / comment / provide opinion
Visits			
Interventions			
Medical and other treatments			
Medication administration and patient response			

6.3 INTERACTION BETWEEN MOTHER AND BABY REFERS TO:

Sub-element	Agree	Disagree	Please elaborate / comment / provide opinion
Coping and bonding			
Family interaction			

SECTION 2 : MEASUREMENT OF COMPLIANCE TO THE PRINCIPLES OF GOOD RECORDKEEPING

1 AN AUDIT TOOL FOR MATERNITY RECORDS BY NURSES SHOULD PROVIDE EVIDENCE OF COMPLIANCE TO THE PRINCIPLES OF GOOD RECORDKEEPING:

Element	Agree	Disagree	Please elaborate / comment / provide opinion

Compliance (refers to the degree to which nurses comply to rules of good record-keeping as described in the literature)			

2.1 THE ELEMENTS THAT SHOULD BE MEASURED UNDER COMPLIANCE ARE :

Element	**Agree**	**Disagree**	**Please elaborate / comment / provide opinion**
Relevance			
Comprehensiveness			
Legibility including signatures			
Legality			
Contemporaneity			
Accuracy of biographical data			

SECTION 3 : AUDIT TOOL

	Agree	Disagree	**Please elaborate / comment / provide opinion**
Audit tool should be simple to use (uncomplicated)			
Should include only the main element listed in tables above with explanatory guidelines using the sub-elements in the tables above			
Should include both main and sub-elements listed in tables above.			
Should not make provision for partial compliance (all or nothing)			
Should not include administrative aspects such as whether stock is charged.			

ANNEXURE 13: INFORMATION LETTER AND CONSENT – FOCUS GROUP – THEORETICAL EXPERTS

P O Box 1755
Ruimsig
1739
11th February 2019

INFORMATION LETTER – RESEARCH ON RECORDKEEPING BY NURSES

I am conducting nursing related research for degree purposes in the maternity unit of two large hospitals in a private healthcare group. The title of the research is *A quality assurance intervention for auditing of nursing records in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The study requires opinions of registered midwives who are regarded as theoretical experts, on a proposal for an audit tool. Opinions will be garnered through discussion. For those unable to attend in person, discussion will be held via telecom.

For those of you who are attending via telecom, please make sure that you have access to your e-mail during the telecom when the tool will be sent to you. For those attending in person, the tool will be presented at the meeting.

At the meeting, a short background on the development of the tool will be presented, followed by presentation of the tool. Although you may be known to each other, opinions that will be discussed in the study will remain anonymous. All your contributions will be coded so that identities will only be known to the researcher and her supervisor. Any direct quotations used in the study will only be identified by the allocated code so will not be traceable to you or any other individual.

Raw data will be destroyed two years after publication of an article on the research study.

Please be informed that:

- Participation is voluntary and entirely at your own discretion and that you can refuse to participate or you may withdraw at any time
- You will not receive any material benefit as a result of your participation in the study
- The meeting will be recorded to enable the researcher to reflect on the discussion after the meeting
- You will be informed of the outcome of the study if you so wish

Should you agree to participate, attendance at the meeting will be deemed as consent.

Should you have any questions about your rights as a study participant, or questions or concerns about any aspects of this study, please call the Ethics Department of the University of the Witwatersrand on +27 11 717 1234 or my supervisor, Dr Sue Armstrong at 011 488 3094.
I thank you for agreeing to consider participating in the study.

Yours Sincerely

Lesley Fletcher

Contact Details:

No 57 Vuurlelie Street
Roodekrans 1734
Landline: 011 768 5969
Mobile: 083 628 8756

ANNEXURE 14: INFORMED CONSENT – FOCUS GROUP – THEORETICAL EXPERTS

AN INTERVENTION TO IMPROVE RECORDKEEPING BY NURSES IN MATERNITY UNITS IN A PRIVATE HEALTHCARE FACILITY

INFORMED CONSENT

I _____ (print name in full) hereby consent to participate in group discussion which will provide opinion on the clinical utility of a proposed record audit tool. I understand that the discussions will be recorded for later analysis. I understand that even if my name is mentioned during the discussions, my identity will not be disclosed in any report, article or any other material related to the study and will be known only to the researcher and her supervisor. Any direct quotations used in the study will only be identified by an allocated code and so will not be traceable to me.

I acknowledge that :

- The purpose of the study has been explained to me and that my input will only be for the purposes of the study
- My participation is entirely at my own discretion and that I can withdraw at any time
- I will not receive any material benefit as a result of my participation in the study
- Participation will not influence my employment or performance management in any way whatsoever
- I will be entitled to be informed of the results of the study

_____ _____

SIGNATURE – PARTICIPANT **DATE**

_____ _____

SIGNATURE – RESEARCHER **DATE**

ANNEXURE 15: TABLE HEADING DEFINITIONS – CHAPTER 4

TABLES 4.1 AND 4.2

Basics:

Score = Value/Score single answer per question

Maximum value = Maximum possible value/score for a single answer to a single question

Maximum critical value = Maximum possible value/score for a single answer to a single question for a critical item, i.e. when the critical point is met

Heading definitions:

Simple Total – Total of all scores for a question

Critical Total – For non-critical points = simple total; for critical points is the sum of only those items that scored the maximum critical value, i.e. met the requirements, for the critical item, it ignores all scores that do not meet the requirement (i.e. are not a maximum critical value)

Full Total – Maximum score possible for a question = maximum value x number of respondents/questionnaires/assessments

Simple Count - Number of respondents/questionnaires/assessments for a question

N/A Count – Number of responses where the score was N/A for a question

Possible Total = Maximum total possible less the N/As which do not have a score, i.e. Full Total – (N/A Count x maximum score)

Standard Score = Simple percentage based on all scores, i.e. Simple Total ÷ **Possible Total** x 100

Critical Score = Percentage of only scores that were the maximum critical value, i.e. Critical Total ÷ Possible Total x 100

ANNEXURE 16: APPLICATION FOR APPROVAL TO CONDUCT RESEARCH IN

[redacted]

P O Box 1755
Ruimsig
1739
Date to be inserted

Mr C …….

[redacted]

Dear Mr …….

APPLICATION FOR APPROVAL TO CONDUCT RESEARCH IN [redacted]

Please accept my application to conduct nursing related research in the maternity unit at [redacted] The title of the research is *An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The research questions focus on the reasons for non-compliance by nurses to recordkeeping standards and whether or not a valid audit tool will assist in developing an intervention to improve the quality of recordkeeping by nurses.

I need your permission in principle in order to submit an application to the [redacted] Research and Scientific Committee. Final permission is dependent on their approval.

The study will be supervised by Dr S Armstrong, a senior lecturer in the Nursing Department at the University of the Witwatersrand.

I thank you for your consideration of this application.

Yours Sincerely

Lesley Fletcher

ANNEXURE 17: APPLICATION FOR APPROVAL TO CONDUCT RESEARCH IN

[redacted]

P O Box 1755
Ruimsig
1739
Date to be inserted

Mr …….

[redacted]

Address

Dear Mr ……..

APPLICATION FOR APPROVAL TO CONDUCT RESEARCH IN [redacted]

Please accept my application to conduct nursing related research in the maternity unit at [redacted] The title of the research is *An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.*

The purpose of the study is to improve compliance to standards of recordkeeping leading to a reduction in risks related to litigation and poor professional reputation.

The research questions focus on the reasons for non-compliance by nurses to recordkeeping standards and whether or not a valid audit tool will assist in developing an intervention to improve the quality of recordkeeping by nurses.

I need your permission in principle in order to submit an application to the [redacted] Research and Scientific Committee. Final permission is dependent on their approval.

The study will be supervised by Dr S Armstrong, a senior lecturer in the Nursing Department at the University of the Witwatersrand.

I thank you for your consideration of this application.

Yours Sincerely

Lesley Fletcher

ANNEXURE 18: APPROVAL FROM HOSPITAL GROUP

[redacted] [redacted]

09 November 2015

ATTENTION: Lesley Fletcher

APPROVAL FOR RESEARCH STUDY

TITLE: An intervention to improve recordkeeping by nurses in maternity units in a private healthcare facility.

Our previous correspondence refers.
This letter serves as authorisation from the [redacted] Research and Scientific Committee for the conduct of your research within company facilities.

The approval is conditional to your agreement on the following provisos:

1. Presentation of this letter to the Hospital or Nurse Manager when seeking permission at the specific facility you will be using during your research.
2. An electronic copy of your research report is submitted to the Life Healthcare Research and Scientific Committee prior to publication.
3. No direct reference is made to Life Healthcare or its various facilities in your research report or any publications thereafter.
4. The Company and its facilities are not in any way identifiable in the study.
5. The research is conducted within one year of permission being given by the Company.
6. Placement of the research report on the Company's research register after approval by the associated Higher Education Institution.
7. There is no cost to the Company.

Please sign below that you agree to the above provisos and return the signed copy to me.

I, Lesley Fletcher, agree to the above provisos.

_____ _____
Signature Date

We wish you the best in your studies and look forward to the results.

Yours sincerely

NB: Hospital and officials' identifier removed

ANNEXURE 19: ETHICS APPROVAL CERTIFICATE

R14/49 Mrs Lesley Ann Fletcher

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M150734

NAME: (Principal Investigator)	Mrs Lesley Ann Fletcher
DEPARTMENT:	Nursing Education
PROJECT TITLE:	An Intervention to Improve Recordkeeping by Nurses in Maternity Units in a Private Healthcare Facility
DATE CONSIDERED:	31/07/2015
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Dr Sue Armstrong

APPROVED BY: Professor P Cleaton-Jones, Chairperson, HREC (Medical)

DATE OF APPROVAL: 30/09/2015

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Secretary in Room 10004, 10th floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report**

Principal Investigator Signature Date 6/10/2015

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ANNEXURE 20: CHANGE OF TITLE

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172076

Reference: Mrs Sandra Benn
E-mail: sandra.benn@wits.ac.za

05 January 2018
Person No: 1296484
TAA

Mrs LA Fletcher
Po Box 1755
Ruimsig
1732
South Africa

Dear Mrs Fletcher

Master of Science in Nursing: Change of title of research

I am pleased to inform you that the following change in the title of your Dissertation for the degree of **Master of Science in Nursing** has been approved:

From:	**An intervention to improve recordkeeping by nurses in maternity units in a Private HealthCare facility**
To:	**A quality assurance intervention for auditing of nursing records in maternity units in a Private Healthcare facility**

Yours sincerely

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

ANNEXURE 21: PLAGIARISM DECLARATION

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

FACULTY OF HEALTH SCIENCES

PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I LESLEY ANN FLETCHER (Student number: 1296484) am a student registered for the degree of MASTER OF SCIENCE IN NURSING in the academic year 2019.

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.
- I have included as an appendix a report from "Turnitin" (or other approved plagiarism detection) software indicating the level of plagiarism in my research document.

Signature: _____ Date: 8 MARCH 2019