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MEDICAL RECORDS MANAGEMENT PRACTICES IN PUBLIC AND PRIVATE HOSPITALS INUMHLATHUZE AREA, SOUTH AFRICA

BY

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ABSTRACT

This study investigates the different medical records management regimes within public and private hospitals in the Umhlathuze Area, KwaZulu-Natal Province, South Africa. The study made a comparison and examined whether the current management practices support service delivery in the context of the Batho Pele principles. In doing this, the study reviewed extensive literature on records management standards and theories, legislative framework of medical records in order to establish the extent of the level of compliance to the set regulatory framework in the management of medical records in South Africa. It also assessed the depth of the integration of ICTs in the management of medical records in South Africa.

The targeted study sample in both the public and private hospital was 193. Of these, only 180 responded and this represented a respondent's rate of 93.5%. The study was largely a quantitative research. The study adopted a survey research design and used multiple forms of data collection techniques such as structured questionnaires, observations and document review. Quantitative data collected was analysed to obtain some descriptive statistics while qualitative data was analysed using content analysis to derive particular themes pertinent to the study. The two sets of results were compared and contrasted to produce a single interpretation and then conclusions were drawn.

The study findings established that the records management practices in both hospitals were not well entrenched thus undermining quality health service delivery. This was evidenced by lack of awareness and existence of the records management policies and procedures manual; lack of adherence records management standard; lack of security measures, with rampant cases of missing files, folios and torn folders; delays in access and use of records; lack of an elaborate electronic records management programme and low levels of skill and training opportunities in records management. The use of paper records is still dominant in the public hospital; while the electronic medical record system was in place in the private hospital with some degree of success even though implementation challenges continue to exist. The integration of ICTs in the management of medical records was more evident in the private hospital while the public hospital continues to be underfunded undermining the current capacity for effective medical records management. The role of accurate, reliable and trustworthy medical records in the

context of quality health service delivery in accordance with Batho Pele principle in both hospitals remains problematic.

In order to enhance the role of medical records for quality service delivery, the study recommended that a regulatory framework for records management should be developed and implemented in both hospitals. It is also recommended that more technical and human resource capacity is required in the public hospital to help speed up the services to its user while the private hospitals need to entrench their evolving capabilities in medical records management. The study further recommends that training around records management should be provided to all staff that deal with medical records management in both hospitals.

Keywords: comparative, ICTs, KwaZulu-Natal, medical records, private hospital, public sector, service delivery, South Africa

DEDICATIONS

This work is dedicated to my sons whom God has blessed me with - Wandisile Ngidi and Athandwa Ngidi. The unconditional love I get from the two of you makes me always push for greater heights; my late husband Mr. Zazi Ngidi for I know wherever you are, you are shining upon us since education was always your drive; and I am glad I met you in my life. To all my family I thank you for your tremendous support since you have always stood by my side. To you my daddy; having you in life bring the tremendous joy of one parent that is able to see me succeed. To my late Mother (Nonhlahla Mbuyazi) I know you would have certainly been proud because you wanted the best for us and urged us to strive higher. To my rock Regina Luthuli (my grandmother) who raised me out of nothing, I will certainly value your teachings and prayers which go a long way and I love you Madlandunawena owadla insikazikwakubeulambile, umenjalo….

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DECLARATION **STUDENT NUMBER: 200706505**

I declare that **Medical records management practices in public and private hospital Umhlathuze Area, South Africa** is my own study and I cited all the sources used and I have used directly quoted work. I have indicated the sources in the list of references.

…… ……

Lungile Precious Luthuli [Ms.] Date

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LIST OF ABBREVIATION AND ACRONYMS

DOH:	Department of Health (National or Provincial in South Africa)
ECT:	Electronic Communication and Transaction (Act)
EDMS:	Electronic Document Management Systems
EDRMS:	Electronic Document and Records Management System
HER:	Electronic Health Record
EMR:	Electronic Medical Record
ERMS:	Electronic Records Management System
HPCSA:	Health Professions Council of South Africa
ICT:	Information Communication Technology
IRMT:	International Records Management Trust
ISO:	International Standards Organization
NARSAA:	National Archives and Records Services of South Africa
NARSA:	National Archives and Records Services
NHA:	National Health Act
NHI:	National Health Insurance
PAIA:	Promotion of Access to Information Act
PIA:	Protection of Information Act
PMI:	Patient Master Index
POPIA:	Protection of Personal Information Act
PAJA:	Promotion of Administration Justice Act
PSC:	Public Service Commission
RMU:	Record Management Unit
SA:	South Africa
WHO:	World Health Organization
WWW:	World Wide Web

CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 INTRODUCTION

Hospitals deal with the life and health of their patients. Medical records serve the most important function of recording data about patients and their well-being (Huston, 2004:10; Mann and Williams, 2003:11). Medical records also provide clinical staff caring for patients with the information needed to deliver the finest care in the present or future hospital episodes (Carpenter et al., 2007:37).

Medical records as a critical source of information that meet the diverse community needs of people seeking medical assistance require that they be well managed in order to establish and show the medical trends and history (IRMT, 1999:1). Good medical care relies on well-trained doctors and nurses as well as high-quality facilities and equipment. This, however, in return, relies on good record keeping (IRMT, 1999:1). Without accurate, comprehensive, up-to-date and accessible patient case notes, medical personnel may not offer the best treatment or may, in fact, misdiagnose a medical condition (IRMT, 1999:2). Good records can also ensure that the hospital administration runs smoothly and therefore saves time and other resources. Managing medical records, therefore, addresses the specific issues involved in managing clinical and non-clinical hospital records, indicating where particular approaches are needed to meet the specific requirements of a records service within a hospital environment (IRMT, 1999:1). Thus, records need to be managed, protected to ensure accessibility at all times. Furthermore, efficient accessibility will ensure good service delivery at all times. On the other hand, poor records management tends to adversely affect patient care since clinical treatment of patients is squarely dependent on their case histories contained in their medical files. Good quality medical records are an essential component of safe and effective healthcare but also have many secondary uses such as health system planning, management, quality control, public health monitoring, program evaluation, and research (Dunlay et al, 2008).

Medical records function as a tool or guide within hospitals and the community they serve (Hajavi, Ebadi and Meidani, 2005). Good medical care implies good service delivery. Good medical recordscan either tarnish or promote the hospital image. Following from this, the issue of poor record keeping has been elaborated on several times as one of the causes of poor health service delivery in South Africa (Katuu, 2015; Khoza, 2008; Marutha, 2011; Marutha, 2016; Pyrene, 2015). However, poor records management in health care institutions is a phenomenon that is not limited to South Africa only (Katuu, 2011; Marutha, 2016). It is also manifest in other parts of the world, particularly in Africa. For example, at a university hospital in Iran, researchers documented that most medical records in the hospital were incomplete and incompatible with established standards.

Incomplete recording or charting is attributed to poor handwriting, lack of documentation of requested information (e.g. laboratory results) and missing pages (Hajavi, Azar and Meidani, 2005:16). In Uganda, hospital staff appeared unaware of the importance of medical records to the treatment and follow-up of patients (Mayanja, 2005:11). In Ghana, the existing records keeping systems of some hospitals were found not designed to collect information on some diseases leading to poor monitoring, supervision, and decision-making on diseases (Adjei, 2000:5). In another example, a researcher at a rural hospital in Ethiopia described a situation whereby patient registration numbers were replicated, records lost, patients assigned new registration numbers, clinical information was recorded on loose scraps of paper and medical records were poorly archived (Wong and Bradley, 2009:3).

This study, therefore, sets out to investigate the role of records in the delivery of public health services. The study further looked at the systems used in the management of records in private and public hospitals in Umhlathuze area, Kwazulu-Natal, South Africa.

1.2 HISTORICAL BACKGROUND OF RECORD MANAGEMENT IN SOUTH AFRICA

The existence and use of records in South Africa can be historically traced to the Khoisan people who began writing signs on rocks a thousand years ago (Harris, 2007:111). The Cape Archives Repository (CAR) contains the oldest record of the country generated by the Dutch East India Company (DEIC) or Verenigde OostIndiesche Compagnie (VOC) which governed the Cape from 1652 to 1795 (Ngoepe 2011:62). The oldest records were witnessed on Van Riebeeck's

ship 65 years ago where history was created and lasted for generations to see the management of records. Authors such as Ngulube (2006:118), Ngoepe and Van der Walt (2010:83), and Ngoepe (2015:3) observe that the management of records in South Africa still has a long way to go as it has taken long for the provision of paper records. This, however, implies that the electronic system will also take a long time to be fully implemented in organizations and for people to adapt to it.

The National Archives and Records Service of South Africa (NARSAA) were established by the promulgation of the National Archives and Records Service of South Africa Act 43 of 1996. This section operates under the Department of Arts and Culture in South Africa. In essence, the mission of the National Archives and Records Service is to foster a national identity and the protection of rights by preserving a national archival heritage for use by the government and people of South Africa; to promoting efficient, accountable and transparent government through the proper management and care of government records (National government handbook. 2017).

According to the National Archives of South Africa (2005), the responsibility of records management should be shared by record-creating organizations, record users, and the National Archives and Records Service. The South African Records Management (2005) applies not only to the governmental bodies but also to all private institutions. According to the model, a sound records management program for both paper-based and electronic records should include the presence of a records management policy endorsed by the heads of government bodies, their top management teams and the National Archives and Records Service; and records management procedures to back the records management policy. There are over 800 laws that regulate the function of records management in South Africa, and only 200 laws that are applicable to the public sector. The study discusses the regulatory framework in South Africa. As much as the NARSAA looks out for public records and bodies, the private hospital adopted one of the laws which are dominant in the private sector which is the POPI Act no. 9 of 2009. This act is favored by the private hospital because its bill protects private body's' records management function due to the involvement of third party. According to the POPI Act Bill no. 9, 2009 "The purpose of POPI is to lay down guidelines regarding the collection, storage, and processing of personal information by the public and private sectors" detailed in chapter two. However, this law

strengthens the relationship between the offsite storage facility and the private hospital to facilitate the overall management of records.

In terms of the National Archives and Records Service of South Africa Regulations (R1458, 2002-11-20) (12), the official designated as the Records Manager shall:

- be in possession of an appropriate higher education qualification, and/or have appropriate professional experience
- have successfully completed the National Archives' Records Management Course
- possess a thorough knowledge of the body's organizational structure, functions, and records system

This, however, has been an issue for decades where records managers lack qualifications yet the NARSAA states it clearly that all records handlers should have a relevant qualification in accordance with records management. Scholars such as Khoza (2008); Marutha (2011); Pyrene (2015); Marutha, (2016) numerous challenges regarding the lack of qualification were found which led to poor management function of records in public and private hospitals. However, the department of Arts and Culture together with the Health Department learn the employment of the Batho Pele principle. Both hospitals are guided by the Batho Pele principle to render service. However, all governmental bodies are bound to comply with the rules.

The Batho Pele principle is meant to layout its customer orientation to better service in the public sector and the formation of eight principles was then formulated in 1997. According to Schalk (2003:29), the Batho Pele principle is articulated as follows: Consultation, Service standards, Access, Courtesy, Information, Openness and transparency, Redress and Value for money.

Service delivery has been an issue in most governmental spheres. However, the study is based on the health sector. Many issues were identified in relation to the management of records in both hospitals. However the private hospital also uses the Batho Pele principle because at the end of the day they belong to the health department, and so they should comply. .

1.3 LOCATION AND CONTEXT OF THE STUDY

The Umhlathuze Municipality was established on 5 December 2000 after the demarcation process and the local government elections. The City of Umhlathuze (KZ 282) is situated on the

northeast coast of the province of KwaZulu-Natal, about 180 kilometers northeast of Durban. The Umhlathuze area covers 795 km² and incorporates the towns of Richards Bay, Empangeni, eSikhaleni, Ngwelezana, eNseleni, Felixton, and Vulindlela, as well as the rural areas under Traditional Councils namely, Dube, Mkhwanazi, Khoza, and Zungu (Madlebe). The population is estimated at 334,459 (National Census, 2011). The Umhlathuze Local Municipality is divided into 30 municipal wards. The municipality borders a coastline that spans approximately 45 kilometers. The N2 highway traverses the Umhlathuze Municipality in a northeast direction towards the Swaziland border and south-west towards Durban. It effectively forms a division between Empangeni and Richards Bay. The R34 provincial main road passes through Empangeni towards Melmoth. However to a large scale the South African government has nine provinces that are under their administration and those provinces are categorized into 283 municipalities (Burger, 2009:287). They include Eastern Cape, The Free State, Gauteng, KwaZulu-Natal (KZN), Limpopo, Mpumalanga, The Northern Cape, North West and Western Cape. The study falls under KZN Province. The public hospital is under the government whereas the private hospital is a standalone facility which is privately owned. The public hospital is managed by the Department of Health whereas records management is taken care of by the National Archives & Records Services of South Africa (NARSA) and is located in the capital city of KwaZulu-Natal, Pietermaritzburg. Public hospitals duties lie with the districts; the districts report to the provincial level and the provincial level reports to the national level but private hospitals are non-governmental stakeholders that operate on their own, governed by a group of shareholders.

This study focused on two major hospitals in Umhlathuze area – one public (Ngwelezana) in Empangeni and a private hospital in Richards Bay. The private hospital; s name is withheld due to confidentiality issues and honoring the agreement, therefore not much will be said regarding its background or location.

(a) Ngwelezana hospital (http://www.kznhealth.gov.za/Ngwelezane/history.htm)

Ngwelezana Hospital is a 554 bedded hospital. It provides District, Regional and Tertiary Services to communities from uThungulu, uMkhanyakude and Zululand Districts. It is situated at Ngwelezana Suburb which is 5km away from Empangeni. Empangeni is about 20km from Richards Bay Industrial area, Harbor and Beaches, and Airport. The hospital began to operate in

1970 as a convalescence hospital. In 1974 the hospital was taken over by the State Health, it had previously been operating under Empangeni hospital. In October 1977, all services were taken over by the KwaZulu-Natal Government. Ngwelezana hospital was intended to be one of the T.B settlements in the Province. The hospital has grown to be one of the largest hospitals in District 28. It has a staff of over 1200 and it services about 7 700 patients per month including referrals from other hospitals; it has 14 departments. Sick children under the age of 12 years have been decanted from Ngwelezana Hospital to Lower Umfolozi District War Memorial Hospital (NPA) since January 2015. The hospital is under the provincial government.

- **Allied Health Service**

    - These services include: Physiotherapy, Occupational Therapy, Clinical Psychology, Dietitians, Speech Therapy & Audiology, Social Work Services, Diagnostic and Imaging Services, Pharmacy, and Dental

- **Medical Services**

    - These services include: General Surgery, Ophthalmology and Burns, Internal Medicine, Family Medicine, Emergency Medicine, Orthopedics, Psychiatry, Critical Care, Anesthetics, Radiology (MRI and CT-Scan), Paediatric, Urology, Ear Nose and Throat, and Maxillo-Facial

(b) The Private Hospital X in Richards Bay

The private hospital requested confidentiality and so we shall not mention their name throughout the study; instead we refer to the hospital simply as the private hospital. The private hospital is located in Richards Bay. It was established 26 years ago in 1991. It is run by the private organization associates and has 15 departments. Its services include: anesthesiology, biokinetics, dentistry, diagnostic radiology, ear, nose and throat surgery, maxillo-facial and oral surgery, neurosurgery, ophthalmology, orthotics, and prosthetisry. Other additional services include: a 24-hour accident and emergency unit, coffee shop, milk bank, pre-admissions, radiology, wound care, diabetic care laboratories, cancer support group, on-site covered parking, retail pharmacy, stork's nest, and emergency service 911.

A preliminary survey shows that both hospitals utilize records and information in the delivery of their health services. This study, therefore, seeks to find out how effective medical records managed as per records management purposes and practices through the use of life cycle model and records continuum model are.

1.4 STATEMENT OF THE PROBLEM

The overarching problem that prompted this study is that, even though the role of medical records in both public and private hospitals have been studied by several scholars (Khoza, 2008; Marutha, 2011; Katuu, 2015; Khoza, 2008; Marutha and Ngulube, 2012), in South Africa there is an apparent insufficient attention paid to the depth of an empirical camparative analysis in the context of quality health service delivery. Moreover, a comparative analysis of the integration of ICTs though alluded to in earlier studies, has not been done in-depth, particularly in the KwaZulu-Natal Province. Thus for example, previous studies such as Katuu (2015), largely focused on public health institutions in South Africa and identified appropriate interventions to address the challenges facing records management in the health care system. However, such studies did not do an indepth comparative study of public and private hsopitals. Other studies by Pyrene (2015) and Marutha (2016) also only focused on public health institutions in the Eastern Cape and Limpopo Provinces respectively; whereas the study by Khoza (2008), reported negligence in private hospitals (Medi-Clinic Private Hospital) in Cape Town but did not compare this state of affairs with any public hospital.

It is evident from the literature reviewed that there is little evidence of empirical studies carried out in the Umhlathuze area, KwaZulu-Natal Province. Besides, most of these studies did not examine comparatively how medical records in private and public hospitals are managed. The researcher thus sought to comparatively examine the extent to which medical records were managed according to the best records management standards and practices in public and private hospitals in Umhlathuze area. It is hoped that the study will enlighten medical records managers, health practitioners and the public on the relevance of the management of medical records within public and private hospitals based on good records management principles guided by appropriate theory, international standards and practice. It is also hoped that this will accordingly assist them to create and keep medical records so as to improve health services delivery.

1.5 RESEARCH OBJECTIVES

The main objective of the study was to carry out a comparative study of the management of medical records in public and private hospitals in the Umhlathuze area with the view to propose effective records management strategies that would improve the health services delivery.

The specific objectives of the study were:

(a) To determine the level of compliance to the set regulatory framework in the management of medical records in South Africa in private and public hospitals in the Umhlathuze area.

(b) To establish current records management strategies, programs, and systems in records management in private and public hospitals in the context of service delivery in the Umhlathuze area.

(c) Examine the extent of the integration of ICTs in the management of medical records in private and public hospital in the Umhlathuze area.

(d) To recommend effective records management practices for efficient public service delivery in the Umhlathuze area.

1.6 RESEARCH QUESTIONS

The following were the key research questions that guided this study:

(a) Is there any compliance to the set regulatory framework on the management of records in South Africa at private and public hospitals in the Umhlathuze area?

(b) What are the current records management strategies, programs, and systems of records management in the context that enhance service delivery?

(c) To what extent are ICTs integrated into the management of medical records in private and public hospitals in the Umhlathuze area?

(d) What are the recommended ways to promote effective records management practices for efficient public health service delivery in the Umhlathuze area?

1.7 JUSTIFICATION OF THE STUDY

This study examined how records were managed comparatively in public and private hospitals in the Umhlathuze area in South Africa. Most of the studies reviewed focus on government hospitals showing that they were faced with the challenge of managing records properly due to resource cuts, lack of skills, and lack of top management support (Katuu, 2015; Ngoepe, 2008; Marutha, 2016). The current study compares the private and public hospitals in the management of medical records in South Africa in the context of how that can improve health service delivery to the users.

Not much has been established comparatively between the two sectors in terms of systems that are being used in managing medical records to improve service delivery. This research will therefore inform both the private and public sector hospitals by revealing, identifying and recommending the necessary records management and e-health systems which will enable the health institutions to render effective public health service. It is anticipated that among other factors, understanding the proper management of medical records will improve systems in place so that there is efficiency and effectiveness in the day to day running of the medical institutions. In this context, the application of the Batho-Pele principles that envisage improved service delivery will be realized.

1.8 SIGNIFICANCE OF THE STUDY

This study is significant for various reasons. Firstly this study is important in that currently, there are no studies that have been conducted comparing public and private hospitals in South Africa in terms of the management of medical records keeping practices. It is anticipated that the results of this study will cast more light in a gray area of medical records management in South Africa. The study will be used to come up with a framework that will provide guidelines to both government and private institutions on the management of medical records.

Secondly, the study will hopefully influence proper training for records management handlers or officers so that they are adequately able to offer skills that will help in preventing disastrous management of records in private and public hospitals. When record keeping is adequately

performed, it improves the coordination and continuity of care, reinforces decision-making capacities, thus augmenting staff accountability, achieving more meaningful and accurate vital health information support for health service delivery. Thirdly, it is hoped that the results of this study will also serve as useful guidelines not only to hospital administrators but also policy makers in government and private institutions. Fourthly, it is also hoped that the study will highlight training needs amongst records management clerks in government hospitals and receptionists in both public and private hospitals. The study will ultimately benefit both public and private hospitals in terms of how they can provide efficient professional information services to their patients and the community at large.

It is further anticipated that the study will expose the problems hampering the management of medical records at the hospital whilst recommending best practices for medical records management. The researcher believes that a broad medical records management program will help private and public hospitals to plan and monitor the delivery of hospital services efficiently and effectively through a continuum of care for the patients. Like any organization, a health care service has a wide range of information requirements. Records management meets a substantial part of these, but others are met by the collection and analysis of data and the production of statistics or by access to externally generated information sources whether in printed or electronic form. Lastly, it is hoped that this study will contribute to the knowledge, resources on records and information management under National Archives in South Africa. The study will also benefit the Department of Arts under National Archives in South Africa in guiding the Health Department as well on issues faced by patient's inefficient records management.

1.9 ASSUMPTION OF THE STUDY

The study was based upon the following assumptions:

1. The level of compliance to the set regulatory framework on the management of records in South Africa at private and public hospitals in the Umhlathuze area is critical quality health service delivery.

2. Records management systems, services, and strategies in place at both private and public hospitals do not aid efficient and effective service delivery.

3. Public and private health service delivery is deeply contingent on properly managed records.

1.10 SCOPE AND DELIMITATIONS OF THE STUDY

The study set out to establish the role of medical records management between public and private hospitals. The study was limited to records management functions in public and private hospital in Umhlathuze area. The study focused on the following trends; records management skills and training, records control, physical storage of the records, records policies and procedures, records management responsibility, electronic records in use, retention, and disposal of records. It would have been ideal to compare hospitals across provinces in South Africa; however, the local hospitals in municipalities do offer a better understanding of the complexity regarding the in-house strategies that are adopted in managing medical records. Further, comparison across the provinces was not feasible due to a wider scope and methodological challenges in data collection given the constraints of time and the resources it would require. The sensitivity of researching the health sector and procedural bureaucracy could not also allow for such a wider comparison, hence the limitation to the two hospitals.

1.11 DEFINITION OF KEY TERMS AND CONCEPTS

This section outlines the key terms and concepts that are pertinent to this dissertation. These terms and concepts form the working definitions for the current study. These include accountability, electronic records, electronic documents and records management system, electronic management system health information, the legal status of the hospital, medical records, and service delivery. The terms and concepts are defined below.

(a) Accountability: The principle that individual, organizations and the community are responsible for their actions and may be required to explain them to others (such as regulatory authorities, shareholders, members and the public). (ISO 15489-1:2001:21).

(b) Electronic record

“Electronic record” means data, record or data generated, image or sound stored, received or sent in an electronic form or micro film or computer generated micro fiche (Information Technology Act, 2000, 3)

(c) Electronic Document and Records management System (EDRMS)

An electronic system or process managed with the aid of computers and software implemented in order to manage both electronic documents and records within an organization. Electronic document and records management systems combine the functions of documents and records management (Pearce-Moses, 2005: 17).

(d) Electronic Records Management System (ERMS):

An electronic system or process – managed with the aid of computers and software – implemented in order to manage different kinds of records within an organization. ERMS may also operate as EDMS (IRMT, 2009:53).

(e) Health information

The health information is defined as any information used to help make an informed health-related decision or to inform oneself of health-related issues, whether at the personal, professional, managerial or political level (IRMT, 1999:13).

(f) Legal status of hospital records

The legal status of hospital records varies from one country to another. Where hospitals are directly controlled by a central government ministry, the legal position regarding hospital records is likely to be the same as for other records of the government. In this situation, if a national records act or equivalent legislation is in force, it will almost certainly apply to hospital records unless they are specifically exempted from its provisions. Where hospitals are subject to a more indirect form of government control, a national records act may still state that it covers hospital records or, more generally, records of any publicly funded body. Alternatively, it may be found that the act specifically excludes hospital records, or more generally that its provisions do not extend to records not directly controlled by government ministries. In some countries, legislation may have been drafted without considering the existence of records of this kind, or the wording may be imprecise. In these circumstances, it can be difficult to ascertain the exact legal position of hospital records and it may be necessary to consult a lawyer in order to clarify the hospital's obligations (IRMT, 1999:21).

(g) Medical record

The medical records have been defined as a chronologically written account of a patient's examination and treatment that includes the patient's medical history and complaints, the physician's findings, the results of diagnostic tests and procedures and medications and therapeutic procedures. It is also called a 'patient record' (IRMT, 1999:10).

(h) Record

There is no universally agreed definition of the concept of record and as such various definitions have been formulated with some concentrating on the form or medium, context, and structure of records (Smith, Siller & Exon, 1995). The ISO 15489(2001: section 3.16) also defines it as "a record received, created and maintained as evidence of information by an organization or individual in pursuit of legal obligations or during a business transaction." UNISA, for example, defines it as recorded information, regardless of format or medium, which has been created, received, used, accessed and maintained as evidence and information in pursuance of its legal obligations or in the transaction of business - included are e-mails, records in electronic form and records other than correspondence (UNISA. 2007:1). For the purpose of this study, a record shall be defined as information documented in any form created, received and maintained by an organization as evidence of its daily transactions and or activities and for the fulfillment of legal obligations.

(i) Records management

Records management like the concept of 'record' has various definitions. The ISO 15489: 2001:1 defines records management as "the field of management responsible for the efficient and systematic control of the creation, receipts, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of the information about business activities and transactions in the form of a record". The (IRMT.2009:12) defines records management as the task of ensuring that all recorded information regardless of form and medium is managed in an economical and efficient manner. Both of these institutions thus define records management as a process starting from creation to disposition. This study agrees that records

management is the systematic control of records use and maintenance from their period of creation to disposition.

(j) Service delivery

The concept of service delivery is closely linked to the discipline of political science and public administration at local and central government levels such as health authorities, home affairs, and defense, for example (Humphreys, 1998; Kemoni 2008). According to O'Sullivan (2002), a service is something performed on one's behalf. He further states that services are an asset that has an inherent value to those who receive them. Service delivery is about the ability of organizations to make available the tangible public goods and the intangible services to the public and or its customers. Public services are services partly or totally funded through taxation.

1.12 OUTLINE OF THE OF DISSERTATION

This dissertation is divided into six chapters:

- **Chapter 1:** This is an introductory chapter that covers the background of the study, the context of the study, statement of the problem, justification of the study, the significance of the study, scope, and limitations as well as defines key terms, of the study.

- **Chapter 2:** This chapter provides an advanced literature review based on the theoretical framework and empirical studies.

- **Chapter 3*:*** This chapter presents the research methodology of the study. This chapter discusses the research paradigm, research procedure used, study population and justification, data collection instruments, validity and reliability of the instruments, data collection procedures, problems encountered during data collection, processing and analysis of data, ethical considerations and evaluation of research methodology.

- **Chapter 4:** Chapter four focuses on the presentations of the findings; the chapter presents data analysis and interpretation using graphs and tables.

- **Chapter 5*:*** This chapter interprets and discusses the findings presented in Chapter four and addresses the questions raised in Chapter 1 of the study. Findings based on the data

collected in the research are discussed by the researcher based on the objectives of the study or research questions.

- **Chapter 6:** This chapter consolidates the study by summarizing the research findings and making recommendations on the management of medical records in private and public hospitals in the Umhlathuze area. Conclusions and recommendations are provided in this chapter.

1.13 SUMMARY

This chapter provided the introduction and background of the study. The chapter introduced the problem statement of the study and defined key terms in relation to the study. The chapter further introduced the objectives and research questions and outlined the assumptions, scope, and limitations of the study. It also underscored the importance of medical records management, research area and outlined the structure of the dissertation. Furthermore, it lays a foundation of related literature review in relation to medical records management.

LITERATURE REVIEW

2.1 INTRODUCTION

Literature review enables a researcher to develop a clear understanding of the chosen research topic; establish what has already been researched on the topic and identify gaps which the researcher's own study can fill. Marshall and Rossman (2006:42) argue that a literature review is a "thoughtful and logical discussion of related literature which builds a logical framework for the research and locates it within a tradition of inquiry and context of related studies".

In this study, the literature review covers the following areas:

- Theoretical framework and records management standards;
- Legislative framework for management of medical records in South Africa;
- Records Management and Service Delivery in South Africa: Batho Pele Principles;
- Integration of ICTs in the management of records in the world and South Africa;
- Empirical studies on medical records management in the world; and
- Empirical studies on medical records management in South Africa.

2.2 THEORETICAL FRAMEWORK AND RECORDS MANAGEMENT STANDARDS

Green (2014:2) defined theory as an organized and systematic set of interrelated statements (concepts) that specify the nature of relationships in the term 'conceptual framework'. The theory provides researchers with a complex and comprehensive understanding of things that cannot be pinned down, thereby providing frameworks with which to analyze data. This study used the lifecycle concept, records continuum model, and integrated model records as frameworks discuss and understand the management medical records functions and elements in the both the private and public hospitals. . These theories and models are compared according to their specific use and specialties in underlining their suitability appropriateness to the study. . In addition, the ISO 15489-1 standard for records management was used as a framework with which records management programmes are measured.

In the proceeding sections, literature reviewed covers the following theories and models and shows the extent of their relevance to the current study:

- Records Life-Cycle
- Records Continuum
- Integrated Records Management Model

2.2.1 Theoretical Framework of the Study

There are several contending theories that guide the management of all types of records as indicated above. These include: the lifecycle concept, records continuum model and integrated model. The theories and models are compared according to their specific use, relevance to the study and are explained below.

2.2.1.1 Record Life Cycle Model

In 1950, an archivist Theodore Schulenburg in the United States advanced the records life cycle model that argued for the control and management of records throughout their life cycle from creation or receipt of a record through its useful life to its final disposal (Penn, 1994:12).

Figure 2.1 below illustrates the records life cycle model.

Figure 2.1: Records Life Cycle model

Source:https://www.jcu.edu.au/__data/assets/image/0006/132585/Records-Lifecycle.jpg

The record life cycle model focuses on records as tangible physical entities, and the physical existence of records themselves especially in the paper world (Mampe, 2012:26). The model posits that recorded information has a 'life' similar to that of a biological organism in that it is born (creation phase), lives (maintenance and use phase), and dies (disposal phase) (Tsabedze, 2011:13).The records pass through stages until they eventually die, except for the chosen ones that are reincarnated as archives. Xiomi (2003) further elaborates that the life cycle model is the best in managing physical records. The lifecycle model regards electronic records as different media similar to film, recordings, and microfiche that only need special handling requirements. Thus a record has four stages in that in the first stage a record is created, the second is the period of active usage, the third stage is when the record is no longer in use and is kept in storage, and the last stage is when it is destroyed (Shepherd & Yeo, 2003). Yusuf and Chell (2000:135-141) observed that the model is more applicable to those studies dealing with the management of paper-based records in organizations. The authors pointed out that the records life cycle model was not suitable for studies investigating the management of electronic records and needed to be replaced with a model that appropriately reflected the special characteristics of electronic records (Coetzer, 2012:39). In discussing the weaknesses of the model in relation to the management of electronic records, Yusof and Chell (2000:135-141) explained that with the evolution of technology, the record grew more prone to transformation and conversion. The concept of a records continuum was subsequently promoted in the records management field because it addressed the management of both paper-based and electronic records. In this current study, the records life cycle assists in answering objective two which deals with current records management strategies, programs, and systems in records management in the context of service delivery in the Umhlathuze area. The perceived weaknesses of the records life cycle model therefore inadvertently led to the development of the records continuum model.

2.2.1.2 Records continuum model

Xiaomi (2003:25) provides the Australian Standard 4390 definition of a records continuum as a consistent and coherent regime of management processes from the time of the creation of records (and before creation, in the design of recordkeeping systems) through to the preservation and use of records as archives. The records continuum model has many advantages over the records life cycle model, most importantly that it demonstrates that the mechanism behind best practices is

the integration of the management of documents, records and archives. Integrated approaches, integrated control, and integrated framework is components of a best practice framework according to the model. The Records Continuum model can be used as a theoretical foundation for studies dealing with the management of both paper-based and electronic records. The model consolidated the eight stages of the Records Life Cycle concept into four stages, namely: creation, classification, scheduling and maintenance, and use of information (Atherton, 1985).

Shepherd and Yeo (2003:10) explain that the records continuum concept was developed in the 1980s and 1990s in response to criticisms of the life cycle model. In a continuum, there are no separate steps. Managing records is seen as a continuous process where one element of the continuum passes seamlessly into another. Pemberton (2003) agrees that the Records Continuum concept is a variation of the Records Life Cycle concept, and argues that it takes a higher intellectual view of records since it follows an integrated model rather than one that is made up of stages. The model stresses the need for records professionals to be involved in the earliest planning stages of information systems.

The Records Continuum Model (RCM) provides a framework for understanding the continuum of records and archives management responsibilities. The electronic records are behind the success of the RCM since it is harder in the digital environment to separate archives and records (Svärd. 2013). The model views records as the process of becoming that can be recalled for further use (McKemmish, 2001). It emphasizes the evidentiary, transactional and contextual nature of records, and takes a multidimensional view of records creation in both social and organizational activities (Svärd. 2013:166). The continuum model continues to contribute to the study when examining the extent of the integration of ICTs in the management of medical records in private and public hospital in the Umhlathuze area through the use of objective three. The model can be used as a basis for analysis and as a tool for action. It highlights the need to:

- develop interconnected methods for document creation;
- establish and maintain the routines within which documents are captured as records, and
- Control the different processes involved in organizing documents and records as an archive (Upward, 2000).

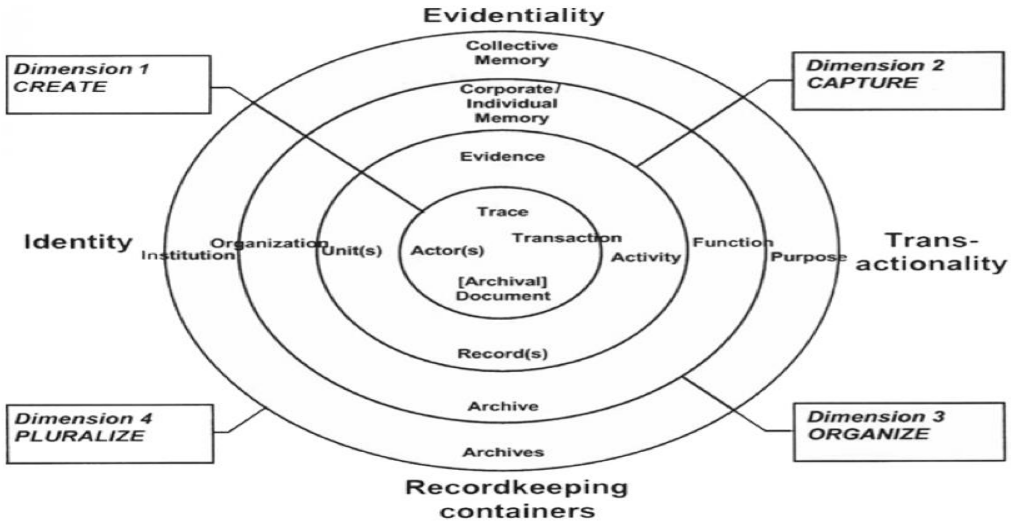
Reed (2005) presented four dimensions of the continuum model which are: create, capture, organize and pluralize as defined in Figure 2. The RCM consists of four dimensions which are:

(1) Create: relates to the business activities that generate the records

(2) Capture: the created record is communicated and acts as evidence of the transaction that took place during creation

(3) Organize: ensuring that the record is given the necessary elements such as metadata so that it will be available over time

(4) Pluralize the broader social environment in which records are used by the different stakeholders (Reed, 2005).



Source: © Frank Upward, all rights reserved

Figure 2.2: Records Continuum model

Xiaomi provides a useful differentiation between the two models which is relevant to understanding these models and relevant to this current study (Xiaomi, 2003:27).

Table 2.1: Records Continuum Model vs. Lifecycle Model

Model Aspect	Life Cycle Model	Records Continuum Model
Origins	• evolved from the need to effectively control and manage physical records after World War II (half a century ago)	• evolving from the more demanding need to exercise control and management over electronic records for the digital era (today)
Elements of records definition	•physical entity	•content •context •structure
Major concerns in records management	•records-centered, product-driven •focus on records as tangible physical entities, the physical existence of records themselves •paper world	•purpose-centered, process- and customer-driven •focus on the nature of the records, the recordkeeping process, the behaviors and relationships of records in the certain environments •digital world
Records movement patterns	time-based: records pass through stages until they eventually die, except for the chosen ones that are reincarnated as archives •time sequence: records processes take place in a given sequence	•multi-dimensional: records exist in space/time not space and time •simultaneity: records processes can happen at any point in the record's existence, or even precede it
Recordkeeping perspectives	•exclusive •single purpose •organizational or collective memory •current or historical value	• inclusive •multiple purposes •can be an organizational and collective memory •can have a current, regulatory, and historical value from the time of creation simultaneously not sequentially
Recordkeeping process	•There are clearly definable stages in recordkeeping and they create sharp distinctions between current and historical recordkeeping.	•The recordkeeping and archiving processes should be integrated.
Criteria for selecting archives	•currency or historical value	•continuing value, including the current and historical value
Time of archival appraisal	•end of records movement	•from beginning to end
Role of records professional	•passive and reactive •locked into custodial role and strategies	Proactive post-custodians: •recordkeeping policy makers •standard setters •designers of recordkeeping systems and implementation strategies •consultants •educators/trainers •advocates •auditors
Records management tasked	•things are done to the records in fixed stages, in a given sequence by particular professional group •records managers and archivists have no business directing what records an organization creates; they are relegated to receiving the physical objects once created •fragmented and disparate accountability of creators, users, records managers, and archivists	•integration of business process and recordkeeping processes – the tasked can happen in almost any sequence by any professional group •records managers are accountable for not only the maintenance but also for the creation of evidence of organizations' purposes and functions •integrated framework for the accountability of players and partnerships with other stakeholders

Source: Xiaomi (2003: 27)

2.2.1.3 Integrated model

An integrated framework sees the management of records as an archival business geared toward customer satisfaction, service, cost-effective management, and best value (Xiomi, 2003:27). It should be customer-driven and integrated into records management through work processes. It also should produce quality information. Integrated control is a means for bringing together the contribution of each participant with something to offer. It is a means of increasing total contribution and completeness of records delivery, improving collaboration among creators, users, archival administrators, and custodians for a better quality of service. The integrated control provides criteria for measuring three aspects of best practice: product control, recordkeeping management process control, and client-oriented service control (Xiomi, 2003:28).

Various governments across the globe are making strides to introduce national Electronic Health Record (EHR) programs. Wagner et.al (2007) assert that England is a worldwide leader in the development of healthcare infrastructure and its funding for electronic health records has been through the government-funded National Health Service (NHS). EHR funding in South Africa, Sweden, Germany, France and the Netherlands continues to be an international problem due to the significant cost of implementation. All these countries provide government funding to support committees that are developing EHR strategies for a national system. Therefore, the integrated model has become a vital entity to improve the old version of the physical aspects of medical records merging in support of records continuum using electronic records.

. Ayers et al (2009) study adopted network used in the management of records in the USA with the hope that something would come up out of adopting the electronic medical records system. This system was defined as a paperless system aimed at improving a physician's life and improving the way records are being managed in hospitals. The adoption network shows that there is much improvement needed in the world of technology even though the perception in the world is that electronics can take care of all the issues regarding the management of records at this point in time. The researcher is of the view that as time goes by and as technology advances, solutions are embraced in records management. In this context, the use of the integrated model

provides some useful aspects in the management of records in organizations. The integrated framework is relevant to the study as it provides an understanding of what is expected in the management of records and how to give satisfaction to records users. The last objective of this study purports to recommend effective records management practices for efficient public service delivery in the Umhlathuze area. This will be discussed in detail in chapter six.

In this model, five levels of integration should be built into the management of recordkeeping processes (Xiaomi. 2003:22-23):

1. ***Common culture***: common understandings and expectations among creators, users, custodians, and administrators on the values and functionality of documents, records, and archives.
2. ***Common standards***: consistent terminology and procedures to make the records continuum routine easier to maintain and interface throughout the recordkeeping process.
3. ***Information sharing***: use of best-practice criteria, policies, and standards in the business management processes.
4. ***Coordination:*** negotiation and exchange of records management policies permitting separate but interdependent, management to respond to each other's needs and limitations.
5. ***Collaboration:*** partnerships of creators, users, custodians, and administrators in implementing integrated frameworks and policies, as well as in accountability for society.

2.2.2 Relevance of the Theoretical Framework to the Study

Penn, Pennix, and Coulson (1994) argue that the life cycle model will become valueless unless it is put into use or practice. The records life cycle is seen as a co-concept of records management (Chachage and Ngulube, 2006:3). The life cycle concept is relevant to this study because on a daily basis large volumes of paper records are generated and used in the public and private hospitals in Umhlathuze area in servicing the patients or community at large. The life cycle model was considered because it allows the tracing of records management between these two hospitals especially on how the physical record is created up until its disposal.

It is important to underscore the fact that the formulation of the lifecycle model as its focus was only on the aspect of physical entity which led to the origination of records continuum. The record continuum not only focuses on the physical entity but on both physical and electronic aspects that include the electronic format of records management (Xiaomi, 2003:23).

The records life cycle model focuses on the physical aspect of managing records and given the evolution of the newer electronic and network, has been criticized as being inadequate in explaining the management of records in their entirety. This led to the development of records continuum and integrated records management models. Since this study looked at both aspects of the physical and electronic forms in terms of management of records in public and private hospitals, it was important to review the other models that would be useful.

The records life-cycle and records continuum models are the dominant theories in the records management field. While various theories have been presented to explain the life of records, the life-cycle theory is still the best alternative when it comes to managing records, especially paper records. As Shepherd and Yeo (2003:10) attest "the lifecycle still offers a useful framework, hence its continuing relevance in records management." On the other hand, with the growing use of computers in institutions, records in electronic form are already being generated, as such; this makes the records continuum model more relevant.

The lifecycle model regards electronic records as different media similar to film, recordings, and microfiche that only need special handling requirements. The records continuum model's ideal of integration can be viewed as a best practice framework for managing records within a broader context of archival science to connect the past to the present and the present to the future, particularly for electronic records (IRMT, 1999:26).

The best-practice framework consists of three components. The integrated framework provides levels of integration for best practice, integrated approaches that provide positive ways of thinking about archival concepts and integrated control that provides a set of unified criteria for measuring models and methods. The formulation of the integrated framework for a management of records in the archival concept was formulated. The focus was more on the integrated framework as it provides broader information about management of records. Thus, employing

these models will provide lenses to get a full picture of the current records management practices in both hospitals from their creation to their final disposition.

The importance of records life cycle in this study is that it guides the understanding of the management of physical records. In that regard, it is suitable for this study as most public and private hospitals are still dominantly paper-based records. In these institutions, large volumes of paper records are generated and used. The life cycle concept was thus valuable to the study as it allowed for the tracing of the records management processes through their whole life cycle. In that way the study was able to establish current records management strategies, programs, and systems in records management in the context of service delivery in the Umhlathuze area. Authors such as Pyrene (2015) and Marutha (2011, 2016) also observed that paper records are dominant in public hospitals.

The perceived weaknesses of the Records Life Cycle model therefore inadvertently led to the development of the Records Continuum model. The Records Continuum Model does not single out the electronic aspect of the management of records but it combines the two formats; and in that context was useful for this study in establishing the extent of the integration of ICTs in the management of medical records. Furthermore, the records continuum model assisted in examining effective records service delivery in the context of how the collaboration among creators, users, archival administrators, and custodians can be improved. In the study, the integrated model also assisted in understanding the criteria for measuring three aspects of best practice namely: product control, recordkeeping management process control, and client-oriented service control (Xiomi, 2003:28).

In addition to the theories and models alluded to above, the ISO 15489-1:2016 was used because it provides the ideal framework for the creation, capture and management of records regardless of structure or form, in all types of business and technological environment over time. It gives guidance on how records management processes should function within an organization and identifies the necessary results and outcomes to be expected. That is to say, it reinforces the importance of records management by providing guidance on how records should be kept in an organization. It also augments the role that records management can play in the strategic direction of an organization by representing the close relationships between recordkeeping,

accountability, risk management, information management and quality management. The ISO 15489-1 is going to be valuable in determining whether the records management practices, programs and standards in the hospitals be it government or private is effective and efficient to support service delivery. In addition it is instrumental in the formulation of recommendations on how the Department of Health in both private and public hospitals can best improve its medical records management programs for effective and efficient service delivery.

2.2.3 ISO 15489-1:2016

The ISO 15489-1 is an international standard for ensuring standardization on the development of records management policies, programs, and procedures. It was formulated based on the Australian Standard AS 4390 for records management. ISO 15489-1 ensures that appropriate consideration and protection is given to all records, again a revised ISO 15489-1:2016 is now in use to assist in the formulation of procedures, programs, and management policies to suit organizational needs. The ISO 15489-1:2016 was used because it provides the ideal framework for the creation, capture, and management of records regardless of structure or form, in all types of businesses and technological environments over time. The ISO 15489-1:2016 was used to determine whether the records management practices, programs and standards in the hospitals be it government or private are effective and efficient to support service delivery. In addition, it was instrumental in the formulation of recommendations on how the Department of Health in both private and public hospitals can best improve its medical records management programs for effective and efficient service delivery (ISO 15489-1, 2016). The ISO 15489-1:2016 further looked at putting the responsibility on an organization to establish comprehensive records management programs which among other things include:

- Establishing which records should be created during organizational business transactions;
- Establishing which form and structure should be created and captured;
- Establishing in which record metadata must be captured in order to facilitate continued use and management through the entire life span of the record;
- Establishing conducive preservation conditions for records;
- Establishing proper records arrangement;

- Conforming to legal and regulatory requirements, standards and organizational policy, and
- Identifying and evaluating opportunities for improving efficiency and effectiveness, which may come as a result of proper records management practices and procedures (ISO: 15489-1, 2016).

2.2.4 The relevance of ISO 15489-1:2016 to the study

The ISO 15489-1:2016 was used to provide proper guidelines and procedures on how records management should be formulated following the International Standard Organization. ISO 15489-1:2016 applies to the creation, capture, and management of records regardless of structure or form, in all types of businesses and technological environments, over time. Therefore it emphasizes the importance of records management and its use, providing guidance on how records should be kept in an organization including hospitals. The ISO does not only cover public or private hospitals but combines all formations in terms of records management. It is responsible for making uniformity in terms of how records should be handled and how they should be used. In the current study, the ISO was useful in determining whether the records management practices, policies, and standards in hospitals were effective and efficient to support service delivery. It was used to understand the formulation of sound recommendations of records management standards and practice regarding medical records management.

2.3 LEGISLATIVE FRAMEWORK IN MANAGEMENT OF MEDICAL RECORDS IN SOUTH AFRICA

This section is about records management governance in relation to the current legal and regulatory framework in South Africa. Properly structured organizations with good records management policies can improve health service delivery. It is important to underscore the fact that, in terms of the medical records management functions, the public as well as private sectors, are governed in slightly different ways in South Africa.

The legislative frameworks effecting the management of records in South Africa are discussed below.

(a) The Constitution (Act No. 108 of 1996)

A constitution is a guide used to protect citizens of South Africa. In addition, each department has its own laws related to it, to guide and protect citizen rights to best treatment and best care in hospital. The constitution not only protects patient's right but it gives them proper referral when issues arise or when mistreated in hospitals. However, this law gives citizens the right to human dignity and shelter, food and anything that makes them not to lose their dignity.

Katuu (2015) provides a useful examination in tabular form of the various laws that govern people in South Africa in relation to health matters. This is shown in Table 2.2.

Table 2.2: A summary of the constitutional right related to health

Section (paragraph)	The right	The beneficiaries
S12(2)	The right to bodily and psychological integrity, which includes the right a) To make decisions concerning reproduction b) To security in and control over their body; and c) Not to be subjected to medical or scientific experiments without their informed consent	Everyone
S24(a)	The right to an environment that is not harmful to their health and wellbeing	Everyone
S27(1)(a)	The right to have access to healthcare services, including reproductive health care	Everyone
S27(3)	The right to emergency medical treatment	Everyone
S28(1)(c)	The right to basic nutrition, shelter, basic health care services and social services	Every child
S35(2)(e)	The right to conditions of detention that are consistent with human dignity, including at least exercise and the provision, at state expense, of adequate accommodation, nutrition, reading material and medical treatment	Everyone who is detained, including every sentenced prisoner

Source: Katuu (2015: 93)

From the current study what has arisen from literature review is that the rights to information in general is enshrined in Section 195(1)(f) which states that public administration must be accountable; while Section 195(1)(g) stipulates that transparency must be fostered by providing the public with timely, accessible and accurate information. However, with specific reference to medical records it is clear that citizens have a constitutional right to health are as well as information relate to its provision the private and public hospital.

(b) The National Archives and Records Service of South Africa Act (Act No. 43 of 1996 as amended) (NARSAA)

The NARSAA is responsible for making sure that the records are managed properly in the public sector as well as to assist, support, set standards and provide professional guidelines to these

institutions. The NARSAA Act No. 43 of 1996 as amended by Cultural Laws Amendment Act 36 of 2001 aims:

> "To provide for a National Archives and Record Service the proper management and care of the records of governmental bodies and the preservation and use of a national archival heritage and to provide for matters connected therewith."

According to the National Archives and Records Service of South Africa established by section 2; [Definition of 'National Archives' substituted by section 7 (b) of Act 36 of 2001.]

> 'non-public record' means a record created or received by a private individual or a body other than one defined as a governmental body in terms of this Act or a provincial law pertaining to records or archives;

- The establishment of the National Archives of South Africa under Act 36 of 2001 facilitated the formation of the branch of the public service of the Republic known as the National Archives and Records Service of South Africa.

[Section 2 substituted by section. 8 of Act 36 of 2001.] This law has its own objectives and functions that govern them. The objects and functions of the National Archives shall be to:

- Preserve public and non-public records with enduring value for use by the public and the State;
- Make such records accessible and promote their use by the public;
- Ensure the proper management and care of all public records;
- Collect non-public records with enduring value of national significance which cannot be more appropriately preserved by another institution, with due regard to the need to document aspects of the nation's experience neglected by archives repositories in the past;
- Maintain a national automated archival information retrieval system, in which all provincial archives services shall participate;
- Maintain national registers of non-public records with enduring value, and promote co-operation and co-ordination between institutions having custody of such records;
- Assist, support set standards for and provide professional guidelines to provincial archives services;

- Promote an awareness of archives and records management, and encourage archival and records management activities;
- Generally, promote the preservation and use of the National Archival heritage.

Furthermore, Sections 8 and 9 repealed by section 13 of Act 36 of 2001 stipulates that an archivist must be able to put together a report stating all expenditures during their work. Under records management, the law states that subject to the provisions of this Act, the National Archivist shall be charged with the proper management and care of public records in the custody of governmental bodies.

For all governmental bodies according to National Archives and Records Service of South Africa substituted by section 16 of Act 36 of 2001 state that:

> The National Archivist shall inspect public records in so far as such inspection may be necessary for the performance of his or her functions under this Act provided that the inspection of public records which contain information the disclosure of which is restricted by any other Act of Parliament shall be done only with the consent of the head of the governmental body concerned.

With respect to governmental facilities that include public hospitals, the National Archivist of South Africa shall perform these when inspecting:

- Determine records classification systems to be applied by governmental bodies;
- Determine the conditions subject to which records may be microfilmed or electronically reproduced; and
- Determine the conditions subject to which electronic records systems should be managed;

For acquisition and management of non-public records, subsection 6 deleted by section 17 of Act 36 of 2001states that:

- The National Archivist may on behalf of the State acquire by purchase or donation or on loan for a temporary period or in perpetuity, either unconditionally or subject to such conditions as may be agreed upon, non-public records which, in his or her opinion, have enduring value of national significance and which cannot be more appropriately preserved by another institution.

- Subject to any conditions as may be applicable, non-public records acquired under subsection (1) shall be deposited in the archives repository determined by the National Archivist.

- The producer or distributor of a recording which is a non-public record in terms of this Act shall, within six months after a request in writing is made by the National Archivist, provide the National Archivist with a copy of the recording in such form as may be specified in the request.

- Subsection (3) shall not apply in respect of a recording that is required to be deposited in a legal deposit library, defined in section (1) of the Legal Deposit of Publications Act, 1982 (Act 17 of 1982), or that has not been broadcast or made public in South Africa.

- The National Archivist shall maintain national registers of non-public records in South Africa which, in his or her opinion, have enduring value, in consultation with the institutions having custody of such records. (NARSAA. ACT NO. 43 OF 1996)

In the current study public hospitals are examined to see the extent to which they are compliant with this act. The NARSAA in South Africa provides guidelines to the National Archive on how to properly manage and care for the records. This includes all governmental spheres dealing with records. The act is responsible for paper base as well as electronic records. This act is relevant to this in that the study examined the records management strategies, programs and systems in records management in the context of service delivery. The study further looked at the integration of ICTs in records management functionalities. However the study further examined the level of compliance on the set regulatory framework in the management of medical records in in private and public hospitals in South Africa. NARS provides guidelines on how management of records should happen. Authors such as Katuu 2015 and Marutha 2011, 2016 all agree that NARSSA is responsible for all governmental stakeholders and how they function.

(c) The Public Finance Management Act (Act No. 1 of 1999) (PFMA)

Another useful act in the current study is the PFMA which assists in the management of monetary use in a beneficial way to related stockholders. The objective of this Act (Polity.gov.za website, 20016) is to:

- Regulate the financial management in the national government and provincial governments; to ensure that all revenue, expenditure, assets and liabilities of those governments are managed efficiently and effectively; to provide for the responsibilities of persons entrusted with financial management in those governments, and to provide for matters connected therewith.

The Act thus seeks to secure transparency, accountability, and sound management of the revenue, expenditure, assets and liabilities of the institutions to which this Act applies. It was amended by Act No. 29 of 1999 and is one of the most important pieces of legislation.

Ngoepe (2008:4) raised an argument regarding whether the government sector that is responsible for management of records is doing its job strategically to benefit its management in relation to NARSA. He further states that law adoption is required to help manage records in South Africa using a systematic and organized approach. Thus several studies in South Africa do affirm that the mismanagement of records not only leads to poor service delivery of its citizens; some examples include files poorly managed with their information on pensions and grants. This raised eyebrows that finance needs somebody with a vigilant eye who is more skilled in that area. In the context of this study, one of the key research questions is to examine the extent to which the management of financial medical records was effective ensuring quality service in both public and private hospitals.

(d) The Promotion of Access to Information Act (Act No. 2 of 2000) (PAIA)

Another important act in this study is PAIA which gives provision to access of information for service that patients should get when visiting the hospital. This Act is about giving effect to the constitutional right of individuals to access any information held by the State and any information that is held by another person. This is required for the exercise or protection of any rights, and to provide for matters connected therewith (Act South Africa. 2000).

Thus, Sections (3-8) of the Act applies to a record whenever it comes into existence. This law says that if a record is regarded as evidence in a court of law, this record can be used in court and can serve as evidence in a case. In general, it says that everybody has a right to information as the South African constitution permits but sensitive information requires permission to be sort in order for it to be accessed. This current study focuses on medical records. Accordingly, medical

records are regarded as sensitive and one needs permission to access them. Katuu (2015) avered that a patient can have access to his or her records but they are only allowed to make copies of a record in private hospitals whereas in public hospitals they only have access to the original because records are regarded as the property of the hospital. He further states that:

> In such a case, whenever a request for records has been denied, there is an elaborate internal appeals process which requires that an individual provides legal reasons for the appeal.

(e) The Promotion of Administrative Justice Act (Act No. 3 of 2000) (PAJA)

The PAJA act relates very much to the current study as it values and relates to the Batho Pele principle by promoting related principles such as transparency and accountability to name a few. This act gives patients the power to stand up to unlawful behavior.

The Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000) (PAJA), is said to be the pioneering legislation that intends changing the way the Government interacts with the people it serves. It creates ways of enforcing the right to be treated fairly in administrative actions. The PAJA seeks to protect the public from unlawful, unreasonable and procedurally unfair administrative decisions. It is a law that gives people affected by administrative decisions the right to be informed that a decision is to be taken, to be given reasons for decisions and to have decisions reviewed in court: "*If it protects people from unlawful, egotistical and domineering law enforcers, then the Act is necessary."* Principles such as openness, transparency, and accountability emphasize the importance of the PAJA for citizens and the Public Service (The Public Service Commission (PSC) Commission House. 2006).

The Public Service Commission house (PSC) (2006) findings revealed that proper implementation is required to include training of staff. The government departments have not properly implemented this part of the legislation and therefore compliance with the requirements of PAJA is seen lacking. The government bodies need to do something about this to make sure their staffs practice this. The PSC (2006) recommended that PAJA should be included in the current and future Batho Pele promotion initiatives by the government.

According to PSC (2006): (Communication and Information Services, 2006)

> Reviewing the ability of the Public Service to implement the PAJA provides useful insight into the current situation and extent to which human rights are being protected and promoted. The PAJA needs to be understood in the context of both the Constitution of the Republic of South Africa, 1996, with its Bill of Rights, and the history of our country, which makes the provision of equitable, quality services for all South Africans imperative.

On the 1st of October 2006, the recommendation of having PAJA included into Batho Pele became a reality. PAJA is available as a white paper by the government seeing that it correlates with the principle and vouches to put people service first.

(g) The National Health Act (Act No. 61 of 2003)

The NHA works as the overseer of health institutions through the provision of various laws and acts to govern the health departments; it covers both public and private hospitals. This act is beneficial to the study as the study is about health.

The aim of the Act is to make sure that everyone has access to equal health services by building a national health system that governs both public and private health services. It sets out the rights and duties of all health practitioners and protects the right of children to basic nutrition and health care as well as the rights of vulnerable groups like women, older persons, and people with disabilities (The National Health Act (Act No. 61 of 2003).

In terms of complaints, the law further states that both in the private and public health care institutions, any person have the right to lodge a complaint about the way, they have been treated by health care providers. The system for laying complaints must be visibly displayed by all medical establishments. Each municipal area will have its own system for laying complaints. Private institutions must allow for lodging of complaints with the head of the establishment. According to the Act, the framework for the health system is based on a decentralized model. This means that power, authority, and functions shift away from the national Department of Health to provincial departments and then to health districts (The National Health Act (Act No. 61 of 2003).

The Health Minister must try to protect, promote, improve and maintain the health of the population by determining policies that will ensure the provision of essential health services. This includes making regulations which ensure that adequate facilities are available for the

training of human resources. The national Department of Health also has a duty to distribute information on available health services including the type and availability of service, the timetables for visits, the procedures for access and for laying complaints, and the rights and duties of patients and health care providers (The National Health Act (Act No. 61 of 2003).

According to the National Health Act (Act No. 61 of 2003);

> "In provincial hospitals, medical records must be kept under the care and control of the clinical manager. Access to such records shall be subject to compliance with the requirements of the Access to Information Act and such conditions as may be approved by the superintendent."

The act further describes the state of the records and who should be responsible for taking care of the records. This relates more to what is expected of records handlers and security measures expected of them.

Regarding records management, the National Health Act No. 61 of 2003 says the health establishment must ensure that health records are available when needed to protect users and the health establishment against the risks of delayed, unsafe or inappropriate care. For the purposes of sub-regulation, the health establishment, must:

(a) Implement a record storage and retrieval system;

(b) Appoint a trained and competent member of staff to oversee the information management department;

(c) Train all managers in the use of and interpretation of information for the monitoring, evaluation, and planning of services;

(d) Protect the confidentiality and security of health records with appropriate security control measures in the records area in line with the Protection of Personal Information Act, 2013 (Act No. 4 of 2013);

(e) Maintain an archival system for the stipulated duration of time according to the

National Archives and Records Service of South Africa Act, 1996 (Act No. 43 of 1996; and

(f) Ensure the protection of health records from theft, fire or water damage.

The act further looks at whether the infrastructure is safe for people to enter into it in getting the service they require in a health care institution. It also looks at waste management, linen services if the users are given clean clothes and sheets when using health facilities.

In summary, the review of the literature shows that the legal status of hospital records varies from one country to another in the world and South Africa is no exception. Where hospitals are directly controlled by a central government ministry, the legal position regarding hospital records is likely to be the same as for other records of the government. For a record management policy to be formulated they need to follow certain rules that guide and direct its formulation. Each organization takes what relates to and works within their organization in managing their records. In the South African context, government departments are under legislative obligations to adopt a systematic and organized approach to the management of records (Ngoepe. 2008:2). However, on the one hand, in government health departments, the National Health Act stipulates that a health record should be *"created and maintained at that health establishment for every user of health services"* and protected (South Africa 2003bSection 13 and 17). Furthermore, South Africa 2003b Section 68 and Section 90 state that the Minister *may make regulations on how a particular record should be managed* (Katuu, 2015:125). On the other hand, the private sector is also bound by these rules and regulations from South African Archives and ISO 15489 for its use, management, and preservation of records. In most institutions, the Records Management Policy establishes a framework for the implementation of the hospital records management program and ensures that full and accurate records of the hospital activities are created, captured, maintained, made accessible, stored and legally disposed of in accordance with legislative requirements (IRMT. 1999:5). On the aspect of records handlers, it is essential for records managers to understand the context within which the records under their care have been created. Records managers working in a hospital environment also need to be aware of the different administrative systems found in hospitals and the particular relationship between hospital administrations and the central government (IRMT. 1999:10). The National Archives and Records Service of South Africa Act (Act No. 43 of 1996) provides the legislative and legal framework on how records management practices in governmental bodies are regulated.

2.4 RECORDS MANAGEMENT AND SERVICE DELIVERY IN SOUTH AFRICA: BATHO PELE PRINCIPLES

One of the key objectives of the current study is to examine effective records management practices for efficient public service delivery in both public and private hospitals. The Batho Pele principle is about putting people first. This means for each and every situation taking place in hospital, it must be beneficial to people at all-times. Case in other words, a patient must come first and they are entitled to receive best care at all times. The study tested whether the principles are applied when treating and dealing with patients by looking for relevant information. However the delivery of services contributes to health care in South Africa in the context of the Batho Pele principle.

Marutha (2011) defines service delivery as a service delivered or that needs to be delivered by the government to its citizens with the aim of meeting their living needs, right demands or expectations. An example of services delivered by the government includes, but is not limited to health/medical, water, routes, education and social services.

Wamukoya and Mutula (2005:2) define public service transformations as; "interventions that affect the organization, performance and working conditions of employees paid from central, provincial or state government budgets."

The purpose of public service transformations is to increase the quality of public services delivered to the population and to enhance the capacity to carry out core government functions. The public service delivery helps to improve the country's economy and social development (Polidano, 2001). Mampe (2013:5) argues that service delivery is about the ability of governments and parastals to make available the tangible public goods and the intangible services to the public and its customers. It should be noted that public services are services partly or totally funded through taxation. Mampe (2013:8) further states that service delivery in the developing countries remains inconsistent with citizen preferences and this is a challenge. As in most African countries and in the Pacific Islands countries, concerns about poor service delivery have been raised.

Service delivery cannot be determined without records management processes; with records management, the level of performance of government agencies and the private sector can be

determined. Medical records serve as a tool within hospitals and the community that they serve (Hajavi, Ebadi and Meidani, 2005). They are an epitome of good service delivery.

In South Africa, the formulation of the National Health Act is to bring about uniformity and direction in the health service practice of the country, as stipulated and mandated in the constitution and other laws at different levels of service delivery (National Health Act No. 61 of 2003:2). The act makes it clear that institutions dealing with health service must ensure that records relating to health services are created and maintained at that health institution for further service delivery, as mandated by the National Archives and Records Service of South Africa Act (Act No. 43 of 1996) and the PAIA.

In line with this Act and other constitutional obligations, Batho Pele was launched. Batho Pele, a Sesotho word which means "People First", is an initiative that was launched in 1997 to transform the public service at all levels because democratic South Africa inherited a public service that was not people-friendly and lacked the skills and attitudes to meet the developmental challenges facing the country. In the struggle to transform the public service, the old culture has to be changed to ensure that our people are served properly, that all staff work to their full capacity and treat state resources with respect.

The Batho Pele White Paper (Section 1.1.1.) states that the South African Public Service will be judged by one criterion: its effectiveness in delivering services that meet the basic needs of all South African citizens. This is emphasized by the following statement: *Public services are not a privilege in a civilized and democratic society, they are a legitimate expectation*. That is why meeting the basic needs of all citizens is one of six of the five key programs of the Government's Reconstruction and Development Programme (RDP) that was initiated after the fall of the apartheid era.

2.4.1 The Eight Principles of Batho Pele

There are eight principles of Batho Pele as stated below (Batho Pele White Paper (Sect. 1.1.1 - 7.1.3) :

1. **Consultation**

Citizens should be consulted about the level and quality of the public services they receive and, wherever possible, should be given a choice about the services that are offered.

2. **Service Standards**

Citizens should be told what level and quality of public services they will receive so that they are aware of what to expect.

3. **Access**

All citizens should have equal access to the services to which they are entitled.

4. **Courtesy**

Citizens should be treated with courtesy and consideration

5. **Information**

Citizens should be given full, accurate information about the public services they are entitled to receive.

6. **Openness and transparency**

Citizens should be told how national and provincial departments are run, how much they cost, and who is in charge.

7. **Redress**

If the promised standard of service is not delivered, citizens should be offered an apology, a full explanation and a speedy and effective remedy; and when complaints are made, citizens should receive a sympathetic, positive response.

8. **Value for money**

Public services should be provided economically and efficiently in order to give citizens the best possible value for money.

Batho Pele is an approach to get public servants committed to serving people and to find ways to improve service delivery. This approach also requires the involvement of the public in holding

the public service accountable for the quality of service provided. Batho Pele is also about moving the Public Service from a rules-bound approach that hinders the delivery of services to an approach that encourages innovation and is results driven. In other words, instead of looking for reasons why the government cannot do something, they have to find better ways to deliver what people need. Managers in public service have a key role to play in creating an environment for their staff to become effective in the way they interact with customers. This requires that they focus on motivating staff, ensure that they have the right tools to do their work and provide ongoing support especially at times when staff is under pressure and stress (Batho Pele White Paper (Sect. 1.1.1).

Improving public service delivery matters not only to the individual users of services but also to the whole community. Improved delivery of service from national and provincial departments, as well as from institutions such as hospitals and tax offices, is essential for the future economic prosperity and social development of the country as set out in the Government's (Growth, Employment, and Redistribution) GEAR strategy. However, the Public Service cannot develop a truly service-oriented culture without the active participation of the wider community, including the private sector and citizens themselves. Batho Pele will, therefore, seek to establish partnerships with the wider community in which business and industry, NGOs, CBOs, academic institutions and other bodies throughout the community can all play a part. For example, local businesses might assist in funding the publication of Service Standards or a telephone helpline, or they might sponsor a customer survey in a variety of official languages (Batho Pele White Paper Section 7.1.3). This, however,gives clear indication that the Batho Pele principle is not only applicable to a public hospital but it is also used by private hospitals. It is also manifested in their website to show that they t too implemented the Batho Pele principle. At the end of the day, private hospitals still follows the health department rules and regulations in South Africa.

The service delivery improvement program should set out, among other things:

- The existing levels of service and the proposed service standards to be adopted in the short, medium and long term;
- How service standards will be monitored and reported on, and the management information systems which will support this;

- The organizational and systems arrangements which will ensure standards are met;
- The human resource training, supervision and appraisal arrangements which will ensure that staff behave in accordance with the Principles of Batho Pele;
- How the department's communications systems will be geared up to provide information about the type and frequency of services that customers require;
- How complaints systems will be developed to identify and rectify failure to deliver the promised standard to individual 'customers'; and
- The financial management systems which will collect data on the unit costs of key services, in order to provide information for standard and priority setting in subsequent years.

Earlier studies conducted on records management by different scholars such as Marutha (2011), Katuu (2015) and Pyrene (2015) all show that both components within the Department (Health and Social Development), were experiencing various challenges as far as service delivery issues were concerned. The key to these challenges was the lack of commitment to implement the PSC recommendations on the Batho Pele principles. The Department further indicated that a lack of funds was hampering the implementation of the Batho Pele principles (Report on the Assessment of the Effectiveness of the Batho Pele Policy in Public Service Delivery. 2012:87). The study further shows that the Department, particularly in KwaZulu-Natal, had been effective in improving service delivery in the areas of accessibility to its services, courtesy, and consultation. Service users'56 views confirmed the improvements and the benefits that they had drawn from the improvements. However, challenges were still identified in relation to information, service standards, openness and transparency, redress and value for money. As a result, service delivery was hampered in these areas. The findings show that the lack of sufficient financial and human resources was mentioned as the main constraints the Department of Health had encountered in its interventions to transform public service delivery.

All has been said by researchers in relation to the management of records in making sure that at the end, service delivery is accomplished. In relation to Batho-Pele principles stipulated by the National Archives of South Africa towards managing records, the Batho-Pele principle was coined to assist records handlers as well as people dealing with the community or servicing

people to have Ubuntu within them in service delivery. The main reason for the formulation of Batho-Pele is to put people first in everything that involves community service. According to Marutha (2011:10),

> Effective and efficient records management will eventually lead to maximum compliance with Batho-Pele principles since all eight principles are dependent on business records. The eight Batho-Pele principles are consultation, service standard, access, courtesy, information, openness and transparency, redress and value for money. The South African government introduced the Batho-Pele principles to transform public services and improve service delivery. Records management is implemented to ensure that relevant records and information are safely kept and made available when required or requested.

This being said, it means that records management plays a huge role in our community at large as it can be used as a reference when necessary in future. The issues of management have been a problem for some time and continue to be if proper management systems are not implemented. The private hospitals use the Batho Pele as well to give quality service to the people they are caring for,

In support of Batho Pele, the private sector also uses policies rendered by HPCSA which give them guidelines on how to function. Further to that, they use the Department of Health policies.

According to Health Care Records – Documentation and Management (2012: 16-17), the main purpose of a health care record is to provide a means of communication to facilitate the safe care and treatment of a patient or client. A health care record is the primary repository of information including medical and therapeutic treatment and intervention for the health and wellbeing of the patient or client during an episode of care. It informs care in future episodes. The health care record is a documented account of a patient or client's history of illness, health care plans, health investigation and evaluation, diagnosis, care, treatment; progress and health outcome for each health service intervention or interaction.

The health care record may also be used for communication with external health care providers and statutory and regulatory bodies in addition to facilitating patient safety improvements, investigation of complaints, planning, audit activities, research (subject to ethics committee approval as required), education, financial reimbursement and public health. The record may become an important piece of evidence in protecting the legal interests of the patient or client, health care personnel, other personnel or PHO. The health care record may be paper, electronic form or both. Where a health care record exists in both paper and electronic form, this is referred

to as a hybrid record. Where PHOs maintain a hybrid record health care personnel must at all times have access to information that is included in each part. This policy applies to health care records that are the property of the hospital and must be maintained by, PHOs, including health care records of private patients seen in the PHO. The policy does not apply to records that may be maintained by patients or clients and records that may be maintained by clinicians in respect of private patients seen in private rooms (Health Care Records – Documentation and Management, 2012:17).

According to HPCSA (2008:6), it is compulsory for health care practitioners to enter and maintain at least the following information for each patient consulted:

- Personal (identifying) particulars of the patient.
- The bio-psychosocial history of the patient, including allergies and idiosyncrasies.
- The time, date and place of every consultation.
- The assessment of the patient's condition.
- The proposed clinical management of the patient.
- The medication and dosage prescribed.
- Details of referrals to specialists, if any.
- The patient's reaction to treatment or medication, including adverse effects.
- Test results.
- Imaging investigation results.
- Information on the times that the patient was booked off from work and the relevant reasons.
- Written proof of informed consent, where applicable.
- Records should be kept in non-erasable ink and erasure fluid should not be used.

Patients in a long stay at the hospital can give an authentic overview of hospital care in accordance to service delivery. Dang et al (2014) looked at medical record keeping and patient

perception of hospital care quality in France. The study revealed that patients that mostly had long stayed in the hospital were the ones who were able to give a clear indication about their hospital stay and their perception of it. The study found an association between compliance with medical records keeping and patient care quality perceptions, any mistake towards the patient recording of information resulted in poor service delivery because the patient would not get the help or treatment he/she deserves. These are some of the things that got the researcher not to be sure whether this was what caused patients not to be satisfied with the service they received in the hospital and caused the hospital to perform poorly to people of France.

In South Africa, service delivery is not only found in medical care institutions but in other, government and non-governmental agencies as Ngulube and Ngoepe (2014) looked at the need for records management in the auditing process in the public sector in South Africa. The public sector was seen as the most valued place that services the public or communities at large; then the need for the government agencies to be audited is seen as a necessity not just to embarrass the staff but to push them in more efficient and professional routes that will help improve service delivery to the people. The internal audits were recommended as one of the things that will help improve service delivery to the organizations as well as to the people. Auditing offers records management practitioners the opportunity not to be missed to propel records management to the new heights.

Records management is always seen as a vital entity in hospitals and institutions as proof that can be presented in a court of law as a supporting document; it is very important that they are properly managed. Marutha (2011) examined records management in support of service delivery in the public health sector of the Limpopo Province in South Africa indicating the extent to which the current records-keeping practices support or undermine service delivery and the e-health readiness levels. Marutha (2011:26), in support of the importance of records management, states that:

> The major proof to protect the doctor and the institution or prove allegations wrong or right are authentic medical records. This is only possible if records are properly managed.

On the other hand, Khoza (2008) alluded to the issue of negligence where the Minister of Health's results were published in the Sunday Times newspaper including her personal information.. This shows that poor service delivery and poor security is not only in government

hospitals but is evident in the private hospitals as well. This raises eyebrows on the criteria used in selecting records handlers if records are found lying around inappropriately for anyone to see. Marutha (2011) also shed light on the issue of negligence in one of the hospitals in Limpopo Province, South Africa. Here the doctors could not operate on a patient because of a missing file. In the case in question, the patient was involved in a motor vehicle accident in 2005 which left her leg partially paralyzed as aptly observed:

> The doctor needed the file which contained information about the patient's accident, health problems and/or sicknesses in order to trace the history or seriousness of the injuries before conducting the operation. Unfortunately, the only available record was about diabetes. He further elaborated that the patient was "now pinning her hopes on the police file that was recorded at the accident scene…if anything in it could help.

Katuu (2015) also examined the managing of records in South African public health care institutions and showed that there was a substantial legislative and regulatory dissonance. He also cited weaknesses in the management of health records in the public health sector in South Africa. The author identified appropriate interventions to address the challenges facing records management in the health care system in general. He argued that the private sector seemed to be more beneficial than the public sector in terms of proper records management and range of systems in place. In most cases, government hospital patients pay less money and sometimes get to be treated without even paying a cent. The government then claims from tax money while private hospitals claim from medical schemes and other sources from the patient. He further argued that the National Health Act is not saying anything about the retention period. The Health Professions Council of South Africa provides some guidance only about the document, i.e. what it is that needs to be kept by the hospital and not to given to the patient. Some of their points were that for an ongoing treatment they need the record back to be able to make reference to it. They further alluded that for research purposes the record is needed as well as to conduct clinical audits etc. The HPCSA states that the records need to be kept for six years or more from the date they became dormant. The researcher found that records handlers were ignorant about the legislative standards involved in managing medical records in hospitals. They were aware of what should take place but were not practicing what they knew.

This shows that more attention is needed on the management of medical records in hospitals. However, it is clear that there are no substantial studies that have comparatively examined

medical records in private and public hospitals in South Africa, especially in the KwaZulu-Natal Province specifically in the Umhlathuze area.

2.5 OVERVIEW OF LITERATURE ON INTEGRATIONOF ICTs IN THEMANAGEMENT OF RECORDS IN THE WORLD AND SOUTH AFRICA

The integration of ICTs is still an ongoing process in most African countries including South Africa. One of the objectives of this study is to look at the level of integration in both public and private hospitals and to determine if record management serves to improve service delivery. This objective examined how the integration of ICTs has changed over time. Since 1994, laws have been formulated to help assist the electronic systems to function, so the study looked at how these systems are used and whether they improve service delivery.

Electronic records need to be properly created or classified from the point of creation in order to be well managed. Within the offices of government and similarly in the private sector, records are created and used to document actions, confirm decisions, identify rights and responsibilities and communicate information. All records can be defined as documents, regardless of form or medium, created or received, maintained and used by an agency, organization (public or private) or individual in pursuance of legal obligations or in the transaction of business, of which they themselves form a part or provide evidence. Records are time bound and cannot be altered in any way without creating a new record (IRMT. 2009:12).

Martin and Voynov (2014) investigated electronic records, health and change management in the USA. They established that not only do electronic health records focus on ICTs but they change whole systems that are responsible for health services and reduce errors because they are easily traceable.. The systems also helped in improving patient safety and the physicians were happy with the EHR (electronic health records) systems. They were able to trace back their work and recommendations were made for hospital management to invest more in EHR systems to improve health services and records management.

Keakopa (2013) argues that electronic records need more people with special expertise when it comes to technology. The author further stated that even if it means hiring relevant people to help records handlers in implementing the electronic systems that will be of efficient use that is worth it. Ngoepe, Mokoena, and Ngulube (2010:63) recommend that records management

professionals “need to be involved in planning for all new systems and in major modifications of existing ones” as these will impact on the management of electronic records. Proper usage of ICTs helps to capture and manage electronic records and it can ensure that the integration of emails in the EDRM system is run efficiently.

Keakopa (2007) conducted a study on electronic records management policies, procedures and guidelines in Namibia, Botswana and South Africa. The study pointed out that South Africa already had available electronic records management guidelines, procedures, and policies. The study also recommended that South Africa be used as a role model by other countries. These guidelines, procedures, and policies can be used by the South African health institutions to manage their records to ensure the successful improvement of service delivery in their health institutions through the effective management of their electronic records.

Marutha (2011:40) also alluded that ICT dependent government services lead to the creation and handling of electronic records. Electronic records are not easy to handle and they need “special care and expertise”. The organization must make sure that they lay a good foundation for the adoption of the new technology in implementing e-records. Keakopa (2007) and Marutha (2011) recommend that records managers and archivist together with ICT people should come together and formulate new systems that will improve the management of electronic records in the world at large.

Marutha (2011) further states that ICTs will not only make management of records more efficient, it will also improve service delivery; so his recommends the implementation of ICTs in each organization to fasten the running of the organizations in South Africa and the world at large.

Thus, the integrated model has become a vital entity to improve the old version of the physical aspects of medical records emerging in support of records continuum using electronic records. The electronic system of medical records has been looked at as the new way to improve the systems of managing medical records in most places or organizations. Before 1993, electronic the National Archives of South African Service did have the capability to store and preservation of electronic records. Records had to be transformed into paper then microfilm. Today this has changed but implementation continues to be stifled with technical and human resources

constraints. In order for proper implementation of new record management systems to take place at its best, it needs efficient people to run it.

Ajami, Ketabi and Torabiyan (2015) looked at the electronic medical records not the physical aspect of it. Their focus was on the performance, servicing the patient and on how they retrieve their medical records when coming to hospitals. They also looked at the standards used by hospital and the record management departments. To determine the effectiveness, certain categories were used in measuring the performance of the hospital in electronic medical records management in Iran, Isfahan University of Medical Sciences. They laid down categories of how to determine the performance; service provision, client satisfaction, security and confidentiality in determining the effectiveness of the electronic records. Employees thus need both technical and communicative skills in order for them to improve their performance. The knowledge of medical records is essential when dealing with a patient. This goal can only be achieved through knowledge, expertise, and training given to these records handlers. In support of records management in hospitals, the IRMT (1991:1) says:

> Managing Hospital Records is primarily concerned with the records of general (or 'acute') hospitals, much of its content is also applicable to the management of records in other health care facilities, such as long-stay hospitals, mission hospitals, sanatoria, community clinics and local health centers.

The lack of technical infrastructure and software commensurate with performance, lack of funds by administrators to implement electronic health records, lack of proper technical support, and the lack of expertise were factors in the efficiency of ICTs in electronic medical records. All in all, the use of electronic medical records or ICTs did improve the services in hospitals through better management. ICTs are used in most hospitals for fast and efficient performance (Ajami, Ketabi and Torabiyan, 2015).

In Europe, countries such as Sweden, Germany, France and the Netherlands continue to have a problem in the context of the significant cost of implementation of EHRs. In all these countries governments provide funding to support committees that are developing EHR strategies for a national system. However, it would seem that this funding programme continues to be a global issue. In developing countries, funding to start or develop such new systems as in Europe remains an issue. Khoza (2008) reported that this seems to be a concern in private hospitals such as Med-Clinic Private Hospital in Cape Town.

The Swedish study on how records need to be managed advocated and created the implementation of metadata schemes in managing records and development. The purpose was to look at the development and implementation of metadata schemes in Swedish governmental agencies. In records management context the purposes of metadata can be viewed from three general perspectives: a business perspective where the primary aim is to support business processes; a records management perspective with the purpose of capturing the essential attributes of records and supporting their management through time. Furthermore, the aim is to enhance "retrieval, understandability, and interpretation of records. The study revealed the need to thoroughly design metadata schemes covering two aspects which are the business and the records management perspective with specific recordkeeping aspects also provided for. ISO and the records continuum were used as a holistic strategy in addressing two aspects of information handling and records keeping... The records continuum model provides such a holistic approach, enabling control of records from the point of origin and during their whole existence. The model does not only address the internal needs within the organization but also takes account of the external requirements and societal context of the organization. The study also showed that the model has potentially practical implications. It can, therefore, be used as guidance when designing tools for recordkeeping, for instance, metadata schemes, as well as to assess and validate existing applications (Troselius and Sundqvist, 2012:18). In relation to the regulatory framework, the metadata can be viewed as one of the models that can be used to properly manage records in accordance with the legislative and regulatory framework.

Keakopa (2007) also shows that if records were properly managed using relevant procedures and policy, nothing would go wrong. This is the reason why South Africa had to establish relevant policies and procedures that are used to direct the management of digital records because it was observed that records management regardless of their format need guidance. The National Archives and Record Service Act (NARSA) of South Africa (No.43 of 1996) as amended in April 2003, issued three guidelines to help government agencies manage all their formats of records, specifically records management policy manual, performance criteria for records managers of governmental bodies, and managing digital records in governmental body's policy guidelines (Muchaonyerwa and Khayundi. 2014).

Furthermore, Muchaonyerwa and Khayundi (2014:44) emphasize that:

> All governmental bodies are obliged by legislation requirements to create authentic digital records that are usable and reliable for as long as they are required for functional, legal and historical purposes.

Muchaonyerwa and Khayundistudy, therefore, sought to determine compliance with the legal framework, identify the obligatory infrastructure for digital records management (DRM), the description of security and preservation were measured for digital records management together with the challenges of managing digital records. The results of the study revealed that the Office of the Premier (OTP) had taken a number of initiatives aimed at establishing records management practices. However, the results showed that the OTP is faced with a number of challenges in its efforts to manage digital records. The majority of those required to manage digital records lacked skills and competencies necessary for the implementation of an Electronic Document Management System. The study also revealed the need for OTP to refurbish the existing arrangements for the security and preservation of digital records (Muchaonyerwa and Khayundi, 2014:44-45).

The study further revealed that there was no integrated approach to managing digital or electronic records in the Office of the Premier. Records were stored in the existing registries and also in offices with little or no control over them. This results in inability to locate documents often leading to delays in responding to requests from internal and external clients (Muchaonyerwa and Khayundi, 2014:46).

The IRMT (1999) pointed out that the lack of trained records managers and other relevant staff in government departments affects the operations or practices necessary for effective management of digital records. Muchaonyerwa and Khayundi (2014) found that most employees working with records did not have qualifications or necessary skills needed by records handlers for efficiency and proper management of records. In relation to the legislative and regulatory framework, if these employees were properly trained about the relevant legislative to be followed this would not be an issue whereby these employees do not know the correct procedures to be followed.

In Namibia, Nengomasha (2003:66) found that there was a lack of effective training as well as poor legal and regulatory tools for management of e-records. It was discovered that other

challenges included poor records storage, lack of records management policies or where they exist, a failure to implement the policies, failure to follow the basic procedures involved in managing records throughout their entire life cycles such as none existence of or failure to implement filing systems and retention schedules. Audit reports still painted a gloomy picture of the poor state of records and records keeping systems.

Mutula (2014) also assessed the status of digital heritage preservation management in Eastern Africa. He found that international agencies played a huge role in funding East African countries to enable them to access databases to retrieve information online using a licensing regime. Once the licence expires, these countries cannot access the records any longer. The license issue was cited as a barrier to the users of information through the rules that are stipulated or imposed by publishers. The study recommended that institutions must take ownership of their materials, have rights that will also benefit them and not allow these publishers to take full ownership of their work, since they end up selling these to them again through subscription to their databases. He further recommended that they should have strategies in terms of having their own systems within, to overcome software and hardware technological obsolescence.

Ngoepe (2017) looked at the digital spectrum in the South African public sector. The study alluded that digital records were implemented in the early 1990s. Metadata was adopted by the functioning of digital repositories to be able to locate materials, content management systems, authentication systems, and digital preservation, however metadata is another form of integration system that help facilitate electronic management. The proper tool for digital repository was seen as one of the things to exist in order to help with the functioning of digital records. The fear of loss of important files for digital records was one of the issues that prompted the need for the implementation of proper digital management tool. The study revealed that digital preservation has been tested in various organizations in government agencies. Therefore, the need for implementation was made in the government entities in South Africa not to focus only on challenges related to digital records system but to give a way forward. The study further recommended that NARSAA should develop a policy on distributed custody government entities to create interim solutions of preservation of digital records. The study adds that NARSAA should invest in capacity development including training and adding the sustainable

infrastructure. Literature such as this is helpful when making recommendations provided the current study's findings are similar.

2.6 CURRENT RECORDS MANAGEMENT STRATEGIES, PROGRAMS, AND SYSTEMS IN RECORDS MANAGEMENT IN THE CONTEXT OF SERVICE DELIVERY IN AFRICA

Records management is a professional field that needs proper implementation when it comes to current records management to help speed up services to its users.

According to the IRMT (2009), Records Managers working in a hospital environment need to be aware of different administrative systems found in hospitals and the particular relationship between hospital administrations and the central government. IRMT (1999:16) further elaborated that poor management of records may result in a record not being retrievable. In addition, proper records management may result in good archiving through its original records. Literature is replete with studies on the management of medical records in the world in general; however, research on medical records in Africa continues to grow. A few selected recent empirical studies exist though most do not take the comparative approach.

Ivwighreghweta and Onoriode (2012) examined the medical records in public hospitals in Delta State, Nigeria. This study underscored that for health care services to be effective; they needed their records to be organized so that they are easily retrievable. Medical documents are to be regarded as legal documents because personal information is recorded there. The lack of management standards and policies were found to be evident in the public hospitals in Delta State Nigeria. The study argued that standards and policies set out the rules to be used in retrieving, disposition and storage. The analysis, however, suggested a need for improvement in most of the departments of the hospital. Staffing was found to be one of the issues that prevented the proper management of medical records in Delta State Nigeria.

Akor and Udensi (2013) investigated the status of records in Nigerian universities in terms of how they are managed. The purpose of this study was to assess record management of the Federal University of Technology, Minna Nigeria and Ibrahim Badamasi Babangida University Lapai, Nigeria. The study revealed that lack of a proper filing system was one of the issues surrounding the filing system in the Federal universities. The institutions themselves need to be managed using records management policies that will enable uniformity. Among others, medical records were found to be not properly managed. There were also issues of file plan, lack of training of both records office staff and users (staff), unskilled and demotivated records office

staff and lack of support from top management. It was revealed that in most organizations, records managers were just hired without looking at the qualifications and no training received.

Adams (2014) on the other hand, looked at the relationship between corporate governance and records management in private and public hospitals in Ghana, examining their effectiveness and efficiency. According to Adams (2014), even though the Ghana Health Service had policies put in place for such institutions to follow; the findings reveal that none of them followed records management policies in restructuring in the day to day running in both hospitals, private and public. None of them had written and approved policies which directed them on how to manage hospital records. Ngulube (2001) and Mihiotis (2012) like Adams (2014) found that most organizations do not have written approval document in support of records management policy in Africa.

Adams (2014) further revealed that the tracking tools of records were most effective in private hospitals in Ghana. When compared to a public hospital in Ghana, organized records were easily retrievable using a card number to track them. The classification systems used were effective and some records were classified as subject names and date. Most of the medical records management and trained staff records handlers did not have a clue on how records should be handled. This implies that records management staff should be trained and should have a working knowledge of how records should be managed since they use them on a daily basis. Furthermore, both private and public hospitals did not have separate storage facilities for records in the various phases of their life cycle and the records were kept together regardless of the lifecycle stage and if recently used were simply all put together. Space was also an issue and the disaster management plans were not properly in place or planned in public hospitals compared to private hospitals that had elaborate plans.

Hannock Tweya's et al. (2016) study looked at the records management system for tuberculosis (TB) infected patients in Malawi. The study's hypothesis was that if records were well managed, it would help the functioning of the hospital to run smooth. The study revealed that if the electronic medical records management system were well integrated, patients that suffered from HIV and TB would be easily identified. The study further revealed that if systems were well implemented, that would strengthen working relations with all stakeholders involved.

Marutha (2011:209) observes that,

> The hospitals need to fully utilize EDMS to save retrieval time, filing space and stationery, such as toner and printing paper. This will pave the way to paperless offices and avoid users queuing for one file, maximum communication with users, lower medical errors, lower costs, and timely access to information, accurate data and high physical efficiency. They need to do that for business processes improvement; to minimize shortage of filing space, missing and misfiling; and resolve damage to records and a shortage of staff. The hospitals need to upgrade and use the existing servers as a storage media for complete electronic patient records keeping. They also need to make available disaster backup for recovery in case it is affected by disasters, such as fire and water. They need to maintain the antivirus used Symantec endpoint protection.

Lack of core competencies in records management was reported by Nengomasha (2009:112) which resulted in poor records management. Records need tools in place for them to be able to survive through proper storage. Because of the budget not being in place, it resulted in poor management. Proper training was suggested as one of the things required by records handlers. Ngoepe (2008) and Nengomasha (2009) both reported the collapse of records keeping system in South Africa and Namibia.

2.7 EMPIRICAL STUDIES ON MEDICAL RECORDS MANAGEMENT IN SOUTH AFRICA

Several studies have investigated records management of medical records in South Africa. Katuu (2015) for example, looked at managing records in the South African public health care institutions, focusing on three objectives: assessment of the legislative, policy and regulatory contextual framework of South Africa's health care system; assessment of the effectiveness of records management within public health care institutions; and the identification of appropriate interventions to address the challenges facing records management in the health care system in general.

Norden et al (2004) in Tzaneen Municipality in Limpopo Province alluded to patients' use of a small exercise as a reference to health care to help health continuation proceed even when the file is missing or lost. Patients are advised to bring these exercise books each time they come to the clinic so that everything is recorded in there. The file numbers as well as the medical history are written down in that exercise book. This exercise book is further used as a referral letter to help the physicians to be aware of what is going on with the patient. The file may be lost but the continuation of care does not stop and the patients get medical assistance.

Marutha (2011) also examined records management in support of service delivery in the public health sector of the Limpopo Province in South Africa, indicating the extent to which the current records-keeping practices support or undermine service delivery and the e-health readiness levels. The study indicated that poor service delivery was still an issue in the management of medical records in hospitals in that there was negligence, for example, files were missing leading to disruption of medical care.

Khoza (2008) also reported on cases of negligence raising concern about the Medi-Clinic Private Hospital in Cape Town following the publication of results of the Minister of Health in the Sunday Times newspaper in 2007. This gave a clear indication that it was not only the public hospitals that were faced with the problems of negligence and missing files. Pyrene (2015) looked at the medical records for healthcare service at the Victoria public hospital in the Eastern Cape Province. Pyrene (2015) observed that there was poor management of medical records for healthcare at the Victoria Public Hospital in the Eastern Cape Province. The study revealed that

Victoria Hospital relied on the manual system of managing records. The study recommended that all those that dealt with medical records management should be trained for efficient management of records in the hospital. It was also recommended that an electronic system should be employed in the hospital to help them track files easily. The author pointed out that with such a system in place, time would be saved and no missing records would be reported.

In the KwaZulu-Natal Province, Kerry (2006) conducted a study at Emtshezi District Municipality, located approximately 165 km North-west of Durban. Kerry (2006) raised concerns like many other scholars about records management – those of missing files and mismanagement of records. However, Kerry noted that the South African public health institutions actually use different health records management systems which do not easily coordinate with each other. Furthermore, public in-house patients' records were often diverted to self-care facilities when seeking medical care. The study also revealed the widely used phenomena of small booklets. Like Norden et al. (2004), Kerry indicated that small booklets were used at Emtshezi healthcare institution to write folder numbers for patients and referral letters to hospitals. However, unlike the current study, this one did not do any comparative study of medical records management between public and private hospitals. It is such a gap that this particular study attempts to fill.

Kerry's study, in particular, focused on records systems used in public health institution in Emtshezi., KwaZulu-Natal. However, the study did not include private hospitals. Many studies that have been conducted, e.g. Kerry, Marutha, Pyrene, and Khoza focused only on one hospital. The current study is different in that it investigates a public and private hospital.

2.8 SUMMARY

The purpose of this chapter was to review related literature for the study. The chapter has discussed the theoretical framework adopted in the study and justification of the study referring to records lifecycle and records continuum. The literature discussed started from the African continent in general moving on to studies conducted specifically on South Africa. Lastly, it looked at service delivery in South Africa in accordance with Batho Pele principles. What came up from the literature were issues that have clouded records management for years, issues of miss-management of files or records in organizations as well as in public reforms. Medical

records have been seen as clouded by poor records management, lack of skillful people to manage records which was attested by various scholars. The next chapter discusses research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The purpose of this chapter is to discuss the research methodology that was used in the study. Kumar (2008:52) defines research methodology as the instrument that is used as a framework or guide for doing research. Bless and Higson-Smith (2000) and Kalusopa (2011) concur that research methodology is the one responsible for giving clear tools and guidelines in collecting data and allows the researcher to draw conclusions between variables. Research methodology is a set of specific techniques for selecting cases, measuring and observing aspects of social life, gathering and referring data, analyzing the data and reporting the result (Neumann, 2011:26).

This section discusses the research paradigm, research approaches, research design, study population, sampling, data collection techniques and ethical considerations. It also presents how data were analyzed and presented.

3.2. RESEARCH PARADIGM

Saunders, Lewis and Thornhill (2009:118) explain a paradigm as the investigative social phenomena from which a particular understanding of current phenomena is attained and explanation attempted. A research paradigm involves various theoretical paradigms such as positivist, post-positivist, constructivist, interpretive, transformative, pragmatism and deconstructivist (Creswell, 2003, Mackenzie and Knipe, 2006). The study adopted the positivist paradigm as it uncovers and measures patterns of behavior and provides precise mathematical statements about the facts they are investigating. The positivist is mostly used in social science as it allows the researcher to assess results without personal value judgments. The positivist approach helps the researcher to get answers about the cause of the situation or the problems being studied (Roth and Mehta 2002:133).

In the current study, the researcher sought to comparatively study medical records management in public and private hospital in order to determine the impact of the appropriate use of such in

service delivery. I used descriptive analysis to uncover the links between those managing records, those initiating dialogue with those that used records which include doctors, nurses, patients, receptionists and clerks.

3.3 RESEARCH APPROACH

Babbie and Mouton (2001:20) state that a research approach is the methodological approach which explains the study for a long time, two major traditional research approaches have influenced how researchers tailor their research designs - these are qualitative and quantitative approaches. However, the mixed research approach has also taken root in recent years. The qualitative research utilizes methods that are interactive and humanistic; for instance, it is possible for the researcher to go into the homes or offices of participants. On the other hand, the quantitative approach employs measures and ratio levels in data collection (Aina, 2002). The mixed method is a pragmatic combination or integration of both approaches to resolving a research issue (Kalusopa, 2011:126). The current study used the quantitative approach. This approach was found useful for this particular study in understanding how records management could influence and determine the kind of health service delivery required for understanding which requisite framework underline good records management governance, recordkeeping system, records management technology and infrastructure, records archival processes and records management human resource capabilities using these multiple sources.

3.4 RESEARCH DESIGN

A research design allows the researcher to use a certain instrument to collect reliable and valid information out of the variables under investigation. This study adopted the survey research design to investigate the different medical records management regimes within public and private hospitals in Umhlathuze area of KwaZulu-Natal Province, South Africa. The survey approach involves the collection of primary data from part of a population in order to determine the incidence, distribution, and interrelationships of certain variables within the population (Ngulube, 2005; Kalusopa, 2011). According to Kalusopa (2011:130), “most status, exploratory or descriptive surveys tend to describe particular phenomenon, that is, its current situation, its properties and conditions, thus answering the ‘who’, ‘what’, ‘when’, ‘where’, ‘how many’ and

'how much' questions". It is important to note that some "surveys are even more analytical or explanatory and try to probe further to explain the 'how' and 'why' by exploring interrelationships of variables and likely causal relationships (Kalusopa, 2011:130). According to Ngulube (2005:200), surveys can also be longitudinal; which is conducted over extended periods of time, usually years or cross-sectional, which focuses on the state of the population in a single dimension or just at one point (Ngulube, 2005:200; Tanner, 2000:81). Many studies examining records management practices have relied on surveys research design (Ngulube, 2005; Kalusopa, 2011; Ngoepe, 2012; Marutha, 2016).

3.5 STUDY POPULATION

The study population was divided into three major groups or strata's - namely staff, users (patients) and external staff which are the contractors for the private hospital. Under the internal staff, the following job categories were considered for both public and private hospitals:

(a) Management

(b) Doctors

(c) Nurses

(d) Medical clerks/receptionists

(e) Users (patients)

The study used records handlers as well as management that are responsible for decision-making within these hospitals. The records handlers refer to nurses, doctors and clerks or receptionists.

3.6 SAMPLING SIZE

According to Hernon and Schwartz (2009:23), a sample refers to a portion of the population understudy. The study used the sampling size that is called convenience sampling. Convenience sampling uses the most readily accessible person or object as a subject in the study (LoBiondo-Wood & Haber 2006:265). In this case, the readily available respondents that meet the requirements of the study include patients at the time the researcher visited the hospital, different

nurses units, OPD where clerks sit, receptionist, doctors found in the wards and heads in relation to the records or file room.

For each department, 2 doctors and 2 nurses were purposely selected out of 14 departments in public and private hospitals, thus totaling 28 nurses and 28 doctors; while for each of the 15 departments in the private hospital, 2 doctors and 2 nurses were purposely selected totaling 30 in each category. The patients in both public and private hospitals were purposefully sampled as and when they entered the hospital and 20 were selected in each case. In the public hospital, 2 management staff, 22 medical clerks/receptionists, 12 patient administrators, 10 ward clerks were all selected. Thus in total, the sample size was 100 for the public hospital. In the private hospital, 3 management staff, 30 doctors, 30 nurses, 10 medical clerks/receptionists and 20 patients – in total 93 members of staff were sampled.

The sample distribution is as follows in Table 3.1for the public hospital and Table 3.4 for the private hospital.

Table 3.1: Public hospital

Participants	Study population/	Sampling size
Patient admin	12	12
Ward clerks	10	10
Doctors	28	28
Nurses	28	28
Records manager/case manager	1	1
Monitoring and evaluation manager	1	1
Users (patients)	50	20
Total	130	100

Table 3.2: Private hospital

Participants	Study population	Sampling size
Receptionist	10	10
Filling clerk	1	1
Managers	2	2
Doctors	30	30
Nurses	30	30
Users (patients)	50	20
Total	123	93

3.7 DATA COLLECTION METHODS

For purposes of this study the researcher used the following data gathering techniques:

(a) Interviews

(b) Questionnaires

(c) Direct Observations

Each of the data collection method is explained below.

3.7.1 Interview

Babbie and Mouton (2010:292) argue that interviews should be held in comfortable surroundings. Interviews were used to gather comprehensive data on the impact of medical records management in the delivery of health care. Structured interviews were conducted with heads of departments; that includes hospital managers, filing clerks from the private hospital, case managers, records managers as external staff working in conjunction with the private hospital and the patient service managers to understand the policy framework pertaining to the management of medical records. The interviews used in the first category were open ended to clarify a number of administrative issues pertaining to the management of medical records and the context of medical records management, and to let them elaborate on the extent of the integration of ICTs in the management of medical records.

Structured interviews were used with the keepers of the records who are involved in the everyday care of records. This was done in order to understand the procedures and existing systems that were in place for managing the records. In these interviews, the researcher wanted to ascertain procedures, retrieval tools in place, classification systems, and filing systems in place for managing medical records. The reason for using structured interviews was to get more clarity regarding the specific goals that they have in improving their services. These were selected on the basis that they were aware of the context of medical records in a hospital environment, the policies in place for managing medical records and procedures to be followed in the management of these records.

3.7.2 Questionnaires

The researcher made use of semi-structured questionnaires to gather data from users of records in the public as well as the private hospitals. Two different types of semi-structured questionnaires were administered to different groups. The first sets of questionnaires were used to gather data from the ward clerks or receptionists and patient administration in charge of medical records. The second one was used to gather data from nurses and doctors in both private and public hospital to investigate the systems being used in managing medical records in all two hospitals in the Umhlathuze area in order to find out if they have proper training regarding the work that they do and policies that they use in managing their medical records.

3.7.3 Direct observations

The researcher also made use of direct observation as a data gathering technique. Direct observation was chosen as it was a more engaging method for the researcher. The hospital system is an intricate system which requires one to gain a thorough insight of all the processes that feed into the system. Direct observation helped the researcher to identify when and where the records were created, and how they were used until they are disposed or retained for permanent value. An observation checklist capturing the following items was developed:

(a) Security;

(b) Workflow processes;

(c) Storage conditions;

(d) Compliance with records management standards; and,

(e) Control mechanisms in place for example indexes, tracking systems, controlling movement, retrieval etc.

A log-book was used to record data on the above mentioned variables that was observed. Observation took place for over a period of two weeks.

The study used the non-participatory obtrusive observations which established, among other things: the storage environments, storage equipment, access and use of records, organization of paper records, appraisal and retention schedules of paper records, security of paper records and ICT infrastructure in the public and private hospitals. Comments and observations were recorded on a personal observation checklist. This method thus enabled the researcher to observe the level of adherence to records management standards, procedures and policies set by the Department of Health or ISO 15489. In addition, the instrument was used to verify information collected through the interviews and questionnaires.

3.8 VALIDATION OF DATA COLLECTION INSTRUMENTS

In research, data collection tools, more so on questionnaires, should be pre-tested to rectify errors or mistakes in ambiguous questions that may not be easy to understand by respondents (Babbie 2007:256-257).

The researcher made use of face validity to determine whether these instruments tended to measure what they were supposed to measure. In this instance, before the process of data collection began, the researcher requested a sample of ten (10) respondents in both the private and public hospitals to answer the questions developed so as to determine whether the necessary information would be gathered using these instruments. Chikuni (2007:16) states, that face validity has been dismissed as the weakest validation technique. Face validity is also known to be related to content validity and construct validity. Creswell (2014:201) argued that validity is one of the key factors in research when it comes to qualitative study. He further stated that it is important to ensure authenticity, truthfulness, and credibility of data collected.

3.8.1 CONTENT VALIDITY

To supplement face validity described above, content validity was also used in this study. Chikuni (2007:16) and Jafarpur (1987: 199) state that content validity can be used to compare the content of the measurement technique to the known literature on the topic validating the fact that the tool does represent the literature accurately. This author avers that content validity is frequently estimated from the review of the literature on the topic or through consultation with experts in the field who have become experts by having done unpublished research in the area. After having critically reviewed the literature, the researcher constructed questions or instruments to cover the known content represented in the literature. The researcher made use of the University of Zululand research committee in the field of Records Management to judge whether or not the research instruments adequately covers the known literature on the subject. The researcher asked the experts to verify the content validity of the interview guides, questionnaires and observation techniques developed.

Content validity of the data was established by cross checking the answers with several informants until the informants were satisfied that the content was accurate. On content validity, the researcher conducted 5 different interviews with administrators to cross check that the data given is the same and continues to recur. The data collection instruments were collected through a visit to Ngwelezana Hospital, the private hospital in Richards Bay, and the Records Management Department where the data collection instruments were tested in the study.

3.9 DATA COLLECTION PROCESS AND PROCEDURES

The researcher firstly pretested the questionnaires to make sure that participants or the targeted population understands the questionnaire and also to determine if the questionnaire was able to obtain relevant data towards the study. Babbie (2007:256-257) agrees that data collection tools, especially questionnaires, should be pre-tested to rectify errors, mistakes and ambiguous questions that may not be easily understood by respondents.

The researcher collected a great amount of data that is more than 50 percent from the field using semi-structured questionnaires, observation and interviews from management in both private and public hospitals in Umhlathuze Area, KZN. The researcher ended up having focused group

discussions with records handlers in some instances to accommodate them in their busy schedule. Furthermore, to help explain and give more clarity of records management terminology to those unfamiliar with it, records handlers from the private hospital (receptionist), the researcher was available to assist. Patients were interviewed as they came to the hospital on a first come first served basis and selected randomly during their hospital visit. Doctors from the public hospital were followed around and when an opportunity came, questionnaires were administered to them. It is important to note that for doctors from the private hospital, appointments were made to suit their day to day running as they were hard to get because of their schedule. Some doctors have private practices away from the hospital which made it hard for the researcher to access all of them. Other doctors worked as contractors in the private hospital unlike doctors from the public hospital who are employed by the government and are easy to get.

3.10 DATA ANALYSIS

Having gathered data, the next step was to analyze the results and report the findings of the research. Data analysis is the process of looking at patterns, finding similarities and themes from data, and drawing conclusion with regards to the study findings (Bernard 2013:394; Mouton 2002:111). Data analysis helped the researcher to detect respondents' state and consistency on the data pattern (Bless and Smith 2003:137). Jhally et al (2001: 138-139) argue that when given interview data in the form of transcripts, it is the researcher's task to interpret the meaning and present their most salient features in a critical and rational form.

The data collected was analyzed qualitatively and quantitatively using Google forms software. Google form is software that is used for various things for educational purposes. Google form was tested in the UK in administrators' training program as a self-assessment on National Education Technology Standards for Administrators. It is a free collaborative software survey, which records all responses in Google spreadsheets which are on the subset of Google document's application and can be downloaded as a Microsoft excel or open office file for further manipulation. To create a survey form or to code data, one only requires a Google account and automatically generates graphs etc. Bar graphs, pie charts, photographs, and tables were thus generated this way and used to present the findings. Transcripts of interviews with open-ended questions and observations were thematically analyzed.

3.11 ETHICAL CONSIDERATIONS

As Punch (2000:69) asserts, “all social research involves consent, access and associated ethical issues, since it is based on data from people about people.” Interviews of participants need to meet the general protocols and procedures for interviewing (Bless & Smith 1995:114). The study ensured that informed consent was obtained from participants. Consent forms and a covering letter were provided (see appendix 1, 2). Permission was sought from the Department of Health through an online application where correspondence with the researcher was through e-mail and the system was updated to the changing status once all documentation were submitted or uploaded on the website of the Department of Health in order to send an alert to the researcher. By requesting consent, the researcher sought to be introduced to any unknown people. Clear permission on where to go and who to speak to was sought and given by the Heads of Departments in the designated hospitals (See Appendix 4). In addition, in the private hospitals, consent was requested by e-mailing the hospital through the Hospital Manager’s Office. The Manager then referred the researcher to the Head Office that deals with research matters in the Private Hospital Group (research related team) in Pretoria. Once all requested documents were compiled and e-mailed to the Head Office of the Private Hospital Group, permission was granted. (See Appendix 3)

The University of Zululand ethical guidelines (2013) were also followed by obtaining ethical clearance. The Higher Degree Committee approved the proposal and issued an ethical clearance certificate No: UZREC 17110-30 PGM 2016/270 (see Appendix 6). The study also subjected all the chapters to a plagiarism check through Turnitin which produced a result of 15% and therefore within allowed threshold by the University of Zululand (see Appendix 5). Thus, it is instructive to assert that this study therefore ensured and met all the required ethical requirements and guidelines as stipulated.

Ethical considerations are important because medical records are legal pieces of information for health care services and thus require utmost confidentiality as they deal with the lives of human beings. (HPCSA, 2007:13_). The health institutions more especially the private hospital was very strict about them not being mentioned by their institutional name. Therefore to maintain that

confidentiality, the name of the private hospital in Umhlathuze Area, the Richards Bay has not been specifically mentioned. Furthermore, the anonymity of the respondents who participated was ensured and they were willing to take part in the study and were not coerced in any way.

3.12 SUMMARY

This chapter provided an outline and background of the research. It also discussed the methodology employed in the study. Quantitative research was discussed and justification for its use in this particular study was given. The researcher identified and discussed the research design, research methodology, population of the study, sampling methods, data collection and data analysis. The chapter also discussed data collection methods and how data was analyzed. Ethical issues were also discussed. The next chapter presents the findings of the study.

CHAPTER FOUR

ANALYSIS AND PRESENTATION OF DATA

4.1 INTRODUCTION

The previous chapter elaborated on the methodology that was used in this study. This chapter presents the findings of the study. . The findings respond to the following research questions:

(a) Is there any compliance to the set regulatory framework on the management of records in South Africa at private and public hospitals in the Umhlathuze area?

(b) What are the current records management strategies, programs and systems of records management that enhance service delivery?

(c) To what extent are ICTs integrated into the management of medical records in private and public hospitals in the Umhlathuze area?

(d) What would be the recommended ways to promote effective records management practices for efficient public health service delivery in the Umhlathuze area?

Marshall and Rossman (1999:150) describe data analysis as the process of bringing order structure and meaning to the mass of collected data. Analysis of data is a process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making. Data for this study were collected using semi-structured questionnaires and interviews with records handlers (doctors, nurses, and records management staff) to understand how medical records were managed while an observation checklist was used to evaluate the systems in place as well as the medical records environment, In-depth interviews were carried out with management to get the feel and knowledge in terms of current and strategic records management vision. Patients were also interviewed with regard to the role of the medical record in service delivery. Figure 4.1 shows the general response rate in percentage based on the returned and unreturned questionnaires.

4.2 RESPONSE RATE AND PARTICIPANTS PROFILE

The targeted population in both the public and private hospital was 193 with the distribution shown in Table 4.1. Thus in all, a total of 193 semi-structured questionnaires were distributed to the records handlers, namely: doctors, nurses, ward clerks and administrative clerks. Out of a grand total of 193, 180 questionnaires were filled in and returned to the investigator. Management comprised of 5 head of records management unit and a non-clinical manager, filing clerks, and two managers from both hospitals. Specifically, in the public hospital, a total of 95 out of 100 records handlers responded, representing a response rate of 93%; while in the private hospital 85, out of the targeted 93 responded, thus representing a response rate of 93.5%.Bobbie and Mouton (2001:261) posit that a response rate of 50% is considered adequate for analysis, while 60% is good and 70% is considered very well. Though, this is not a survey meant to generalize, this implies that the response rate for this study was more than adequate. Table 4.1 presents this information.

Table 4.1: Questionnaire response rate (n= 180)

Types of Hospital	Questionnaires distributed	Doctors	Nurses	Clerk/ Receptionist	Management	Patients	Wards clerk/ filing clerks	Questionnaires not returned	Grand Total
Private	93	25	30	7	2	20	1	8	85
Public	100	26	28	12	2	20	7	7	95
Grand Total	193	51	58	19	4	40	8	13	180

Table 4.1 indicates the respondents as per category of the targeted study population and the response rate of 180. As shown, all the nurses responded very well but it is important to underscore the fact that the researcher required to work around their schedule in their respective wards given their busy schedule. They were able to take turns in responding to questionnaires while in other instances, focused groups were done to help speed up the process and to get more clarity or make them understand the records management terminology that most of them were unfamiliar with. As for the doctors in the public hospitals, owing to their busy schedule, the researcher had to follow them around so that they were able to respond to respective

questionnaires. Breaks were largely maximized for this. This was different at the private hospital where meetings were scheduled through a representative and interviews were successfully done. It is important to note that doctors in the public hospital could easily be tracked while those in the private hospital had to be scheduled. This is because in private hospitals doctors have their own private practices far away from the hospital and were used by private contractors and not on a permanent basis. In contrast, in public hospitals, the doctors are part and parcel of the hospital, as they are employed by the government and are mostly on a permanent basis which made it easier to locate them within the hospital.

.In the public hospitals, the receptionists and ward clerks were usually on call as admission clerks and dealt with the admission of patients that come to the hospital and all 12 responded very well. However, the researcher was able to work around their schedule and they took turns to respond. The receptionists, in the private hospital have no central role in the hospital and so they are the ones who run the show ensuring that w patients pre-book beds; they also assist in opening patients files every day. Due to their busy schedule, the researcher had to sit around to wait and grab every opportunity for them to respond to the questionnaire. The patients, were easily interviewed in both public and private hospital since they were easily accessible on a first come, first serve basis. The management in both the public and private hospital was also interviewed according to their availability and they all responded very well. There was no problem interviewing the off-site storage management for the private hospital as these were easily scheduled.

The next sections thus presen the findings of the data collected as per the themes adapted from the objectives of the study.

4.3 LEVEL OF COMPLIANCE TO THE SET REGULATORY FRAMEWORK IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

The best policies and procedures in the management of records in any organization reflect the importance of taking the law very seriously so that there is accountability and transparency at all times. According to National Archives and Records Service of South Africa (2007:2):

> "The legislative provisions in section 13 of the National Archives and Records Service of South Africa Act (Act No 43 of 1996) are aimed towards promoting sound records management and thereby promoting transparency, accountability, and better service delivery".

The ISO 15489 - 1 mentions that, the organization should have adequate compliance in relation to the regulatory environment in records management. Best practice entails that policies and procedures of organizations should be in coordination with the application of the regulatory environment to meet its business processes in the management of records (Kalusopa, 2011:228).These are usually statutes, mandatory standard practice, codes of best practice and codes of conduct and ethics. The nature of organization and sector determines the regulatory elements (ISO 15489-1: Section 5). In that regard, the researcher wanted first, to investigate the policy in general that governs the hospital and second, to determine if the public and private hospitals were compliant in terms of the records management policy that governed the management of records. Further, the research examined how this policy covered the management of both electronic as well as physical paper records. In presenting this, the section has been broken down into the following items:

- Policy used on Management of records in public and private hospitals
- Legal and policy framework on records management in public and private hospitals
- Records management policy in public and private hospitals
- Responsibilities on Records Management in public and private hospitals
- Policy Types of Formats in public and private hospitals

4.3.1 Policy used on Management of records in public and private hospitals

For each organization to run smoothly it needs the policy to help guide it in order to perform at its best and policy helps the organization to function. “The National Policy on Management of Hospitals is aimed at ensuring that the management of hospitals will be underpinned by the principles of effectiveness, efficiency and transparency” (in terms of sections 3(1)(c) and 23(1) of the National Health Act, 2003 (Act no. 61 of 2003).

The study revealed that both public and private hospitals have a policy that governs the hospital’s day-to-day running. As indicated in Figure 4.2, in the public hospital 79 (55%) agreed that the hospital does have a policy that governs its records management and only 4 (3%) said there was no such policy. In the private hospital, 58 (40%) respondents agreed that they do have a policy that governs the hospital and 2 (4.3%) said, no they did not. When combined, 138 (95.8%) out of 144 respondents agreed that there was a policy that governs the hospital and only 6 (4.2%) said there was no such policy. This demonstrates clearly that both the public and private hospitals do in general have a strategic policy direction in the management of hospital records.

In terms of awareness, in the public hospital, it was stated that they were aware of policies that govern the hospital management in general and that they had national guidelines from the Department of Health that they follow. As one of the respondents stated:

> *“As the hospital, we only receive instructions from the National Health Department on records management policies. We only follow procedures, as for policies they are being drafted by national (Department of Health), we only follow and use procedures that work for us as the hospital out of what we receive”.*

However, the private hospital does not follow the policies of the Department of Health but they have their own rules or policies drafted at their Head Office based on their mission and vision in relation to the Health Profession Council of South Africa guidelines and the Health Department policies. With regards to laws formulated by government, the private hospital said they do obey them and cited the new act called Protection of Personal Information Act (POPI) in relation to the external storage used by organizations in relation to records management. Furthermore, the hospital uses the company group policy that they strictly adhere to. The study revealed that the hospital does have a policy in place to govern hospital dealings. Figure 4.2 illustrates this.

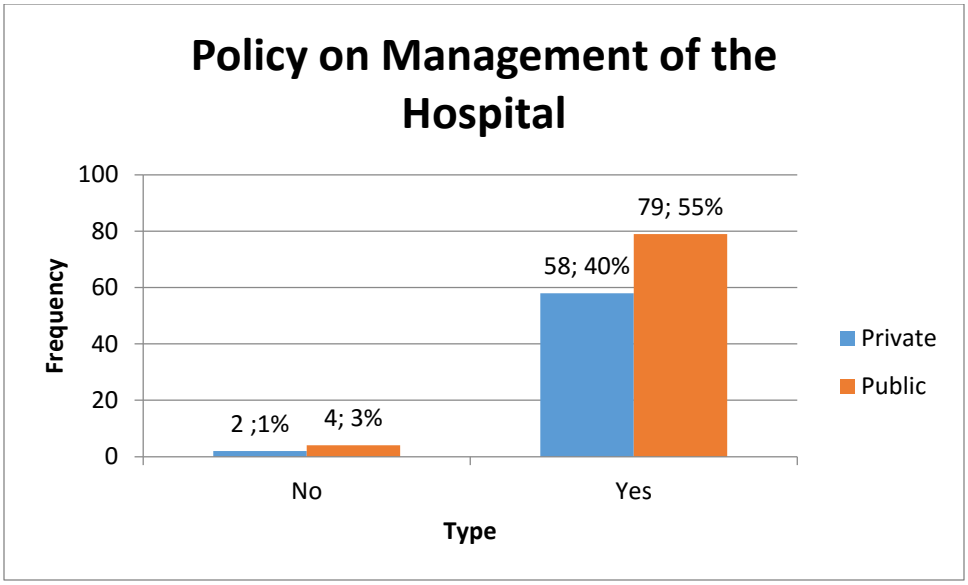


Figure 4.2 General policy on management of hospitals

4.3.2 Legal and policy framework on records management in public and private hospitals

According to ISO I5489 – 1: General section, proper management leads to best practices of policies and procedures and that should go together with the application of the regulatory environment to their business processes in records management. The compliance to the regulatory environment should provide adequate evidence in relation to the records of its activity. According to private hospital website (2016) "*We are guided by international best practice and the guidelines set out by the Department of Health, including the Batho Pele principles and the Patients' Rights"*

The findings revealed that 4 (5.55%) from the public hospital were aware of South African National Archives (NARSAA) and 2 (4.54%) from the private hospital indicated that they were aware of NARSAA. The majority of records handlers indicated that they were not aware of the NARSAA and what NARSAA entails, with 19 (26.38%) from the public and 11(25%) from the private hospital. The private hospital does not comply with the National Archives and Records of South Africa because they do not fall under NARSA. The POPI Act endorses the use of commercial records. This act was formulated in 2009 by the government to help put an order in commercial records and formal working relations. These results imply that the records handlers were not aware of the law that governs records management. However, the management was the

one who seems to be aware of the NARSAA and its content as well as use. The population was comparatively higher in public hospital than in the private hospital as indicated in Table 4.2.The private hospital were instead asked if they do refer to any policy when managing records. The response to that was they only know how to operate the system that they have been trained for.

Table 4.2 Awareness and policy used to governs the hospital records management

Type of hospital	NARSAA Act	I don't know	Not sure	Other	Grand Total
Private	2 (4.54%)	11 (25%)	10 (22.72%)	21 (47.72%)	**44(37.93%)**
Public	4 (5.55%)	19 (26.38%)	13(18.055%)	36 (50%)	**72 (62.068%)**
Grand Total	**6**	**30**	**23**	**57**	**116 (100%)**

4.3.3 Records Management policy in public and private hospitals

The study sought to see if the public and private hospital had a policy that is specifically on records management and if the hospitals use the policy in managing their records. The findings revealed that, the majority of the respondents in both hospitals said they do have a policy that governs the hospital medical records management but they were not aware of what the policy entails. Thus, 75 (54%) said yes in public hospital and 5 (4%) said no, they do not have a policy on medical records management. In the private hospital, 59 (42%) indicated that they had a policy while only 1 (1%) said they did not. This implies that both the public and private hospitals under study do have records management policies in place as illustrated in Figure 4.3 but this was there was a comparatively higher population in public than in private hospital. The lack of understanding in terms of applying the policies was seen as a weakness.

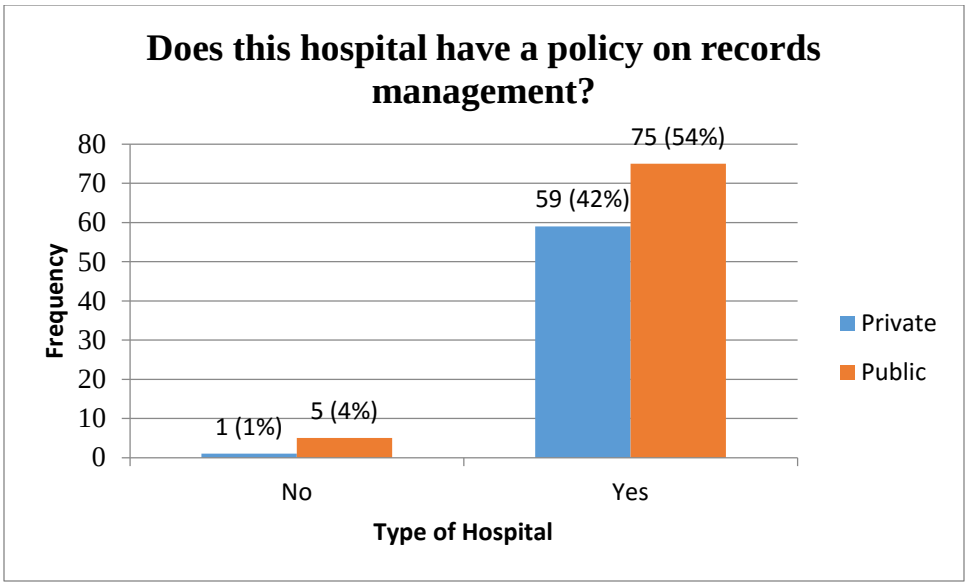


Figure 4.3: Policy on records management

4.3.4 Policy on responsibility on records management in public and private hospitals

The IRMT (1999:2-3) differentiates responsibilities in various ways in the management of records. The researcher sought to find out the specific responsibilities of the records staff towards users. The IRMT (1999) further argues that records officers are there to provide services to the users or action officers who require a record for use. Users' needs are thus to be treated with dignity, co-operation and professionalism at all times. Again, the ISO 15489 – 1:2001 encourages organizations to have a clear policy on the responsibilities of records management to ensure accountability in the services rendered.

The researcher wanted to find out if the records handlers have clearly stipulated responsibilities in the management of medical records. The findings indicated that the public hospital did have clear responsibilities towards the users and 74 (52%) indicated that the hospital does have a written policy that states all the responsibilities. In the private hospital, the findings reveal that the staff was aware of their responsibilities towards their users and 55 (39%) indicated that their responsibility towards their users is very clear. These results are shown in figure 4.4. These results, however, give a clear indication that both hospitals should have a written policy on responsibilities.

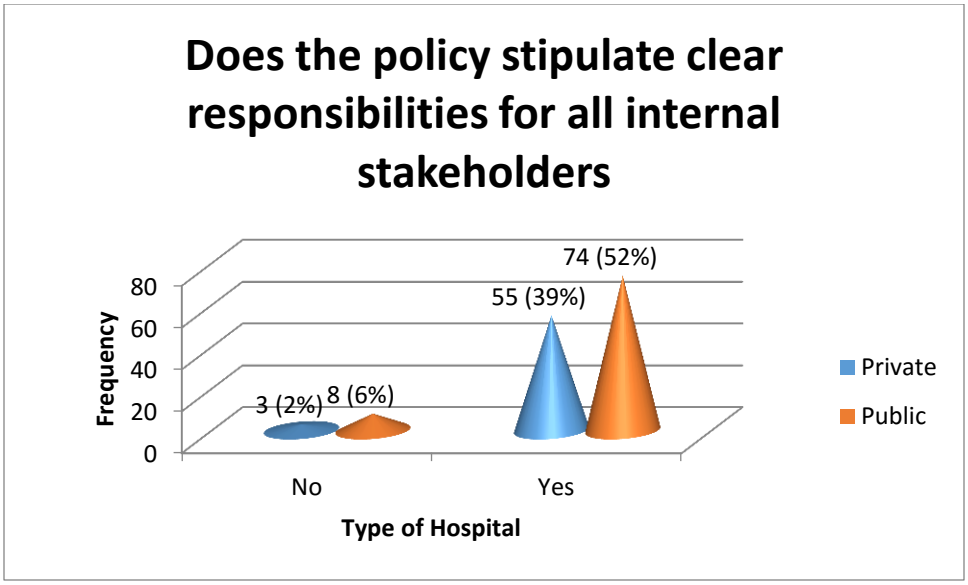


Figure 4.4: Policy stipulating clear responsibilities for all internal stakeholders

4.3.5 Policy on the types of formats in records management

Paper records are still taken as dominant formats in most organizations. The study revealed that the public hospital still relies on the traditional way of managing records, using paper records. However, the private hospital uses both formats, which include both electronic as well as paper records. The records handlers were asked to indicate the types of formats that they used to manage medical records. In the public hospital, 40 (80%) indicated that they use the manual system and 23 (56%) indicated that they are not sure of formats in use. Moreover, in the private hospital 27 (43.9%) indicated that they use both formats to manage medical records and 10 (20%) indicated that they used paper records. These results clearly imply that in public hospitals they still need to employ electronic systems (computers, SAP, MEDID, etc.) while the private hospital, on the other hand, needs to expand the use of their electronic systems in other areas. Figure 4.5 illustrates how much is a paper and electronic records is used.

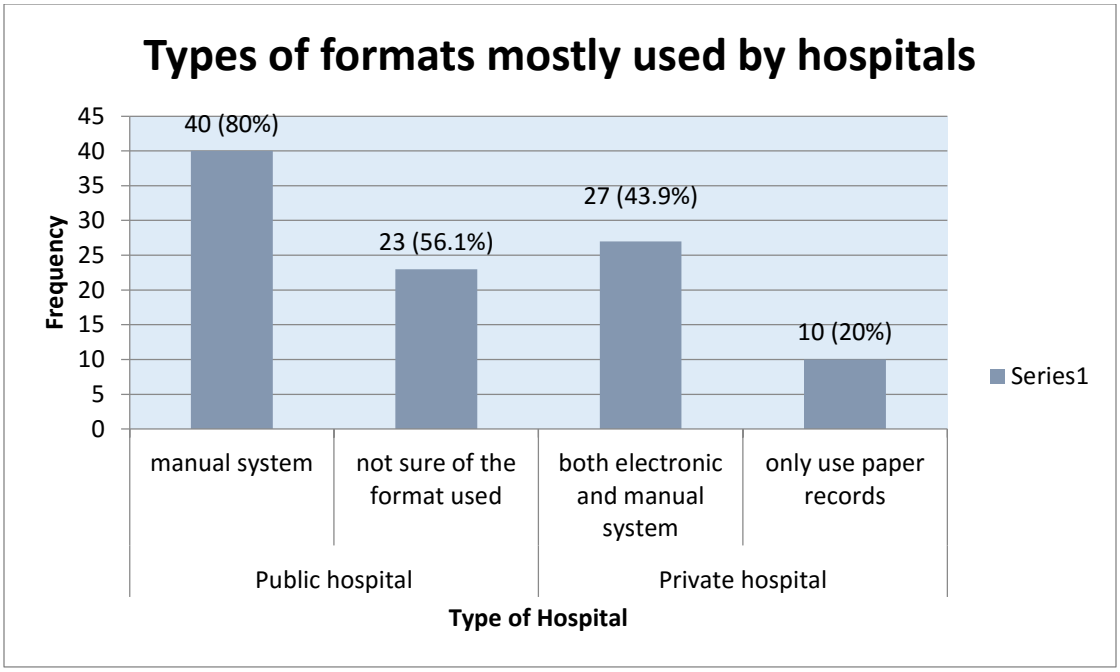


Figure 4.5: Types of formats

4.4 CURRENT RECORDS MANAGEMENT STRATEGIES, PROGRAMS AND SYSTEMS IN RECORDS MANAGEMENT IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

The IRMT (2009) defines records management as the task of ensuring that all recorded information regardless of form and medium is managed in an economical and efficient manner. One of the key objectives of the study was to find out the current records management strategies, programs and systems. Thus good records management governance, recordkeeping system, records management technology and infrastructure, records archival processes and records management human resource capabilities are key to effective management of medical records. The assumption was that both public and private hospitals need to put in place good records management strategies, programs and systems for effective management of medical records.

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In this regard, the researcher wanted to find out how the records were created, received and which of the records unit maintained which formats. The researcher further wanted to find out the classification of use and how files are requested from the RMU and if the classification scheme was efficient and whether the retrieval system was useful and easy to use. The following sub-themes discuss these findings:

- Structure of record management system
- Responsibility for the management of records
- Level of qualification in general education and records management
- Creation of medical records
- Types of records used
- Quantity of records created
- Classification scheme in place
- Procedure manual in use for medical records
- File tracking system and tools
- Location and length of retrieval of medical records
- Frequency of use of medical records
- Appraisal and Retention schedules of medical records
- Disposal/Destruction of medical records
- Challenges faced in management of medical record
- Records storage, security, and preservation of records Disasters management and recovery

4.4.1 Structure of record management system

The respondents were asked to indicate which type of structure of record management system the hospital had adopted. The findings revealed that in the public hospital 63 (46%) confirmed the use of centralization when managing records and 5 (4%) disputed, saying they use decentralization while 20 (15%) were in-between and not really sure of the system being used. In the private hospital, 20 (15%) indicated that the hospital used decentralization, 11 (8%) indicated centralization and 22 (16%) were not aware of the system used. These results, however, revealed that the public hospital used centralization system for managing their medical records while the

private hospital uses decentralization. The researcher did observe that the public hospital managed only the paper-based records whereas the private hospital uses both electronic records and paper records. However, the private hospital uses the external storage for management of their records. The researcher further observed that space was an issue in both hospitals and the public hospital ended up using the container which they referred to as 'KHULUKUTHU' (dumping area). The results are indicated in Figure 4.6.

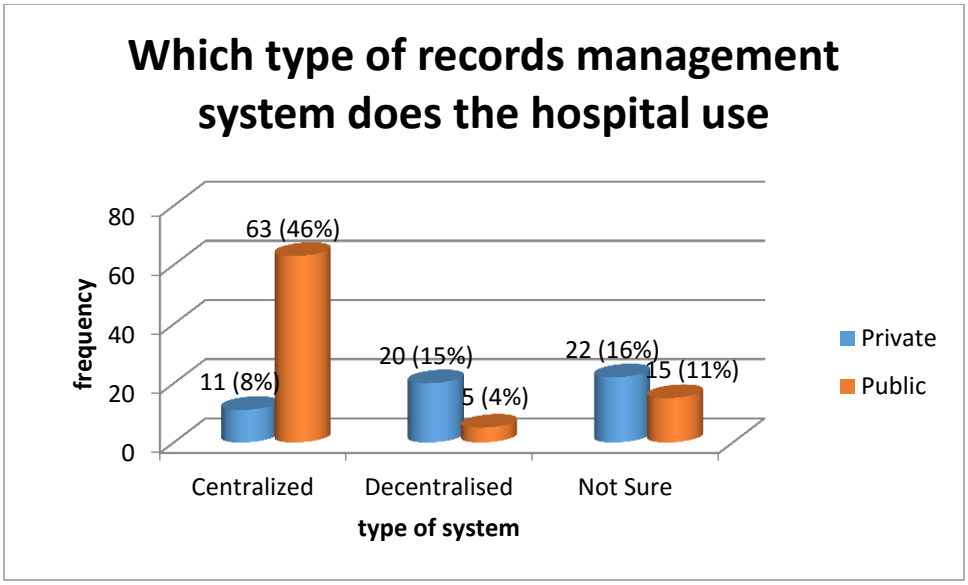

Figure4.6: Records management system

4.4.2 Responsibility for the management of records

According to IRMT (1999), an organization should have people who are responsible for overseeing the overall records management units. The respondents were asked if they were aware of who is responsible for the overall management of medical records in both hospitals. Comparatively, more people from the public hospital responded to the question than from the private hospital. As shown in Figure 4.7 in the public hospital, the majority 52 (39%) indicated that the records were managed by the administrative officer while 11 (8%) thought they are kept by records officers. In the private hospital, 20 (15%) indicated that the records are kept by records officers and 16 (12%) thought these were kept at the administrative office. These results

imply that not all public hospital and private hospital records handlers not all of them are aware of who keeps the records. .

Figure 4.7 Management of medical records

4.4.3 Level of qualification in general education training in records management

The study discovered that, in terms of education, the highest level of qualification of those that managed records in public hospital was a diploma (24 (33.33%)), followed by degree (21 (29.16%)) and the last one was certificated. On the other hand, in the private hospital, the dominant qualification was diploma (20 (37.73%)), followed by degree (19 (35.9%)) as indicated in Table 4.3. The results imply that even though the employees are generally highly qualified in both hospitals, the truth remains that the records handlers have irrelevant qualifications for records management and the profession is taken for granted in that anyone can just manage records without the necessary skills.

Table 4.3: Records handlers' level of qualification

Types of hospital	**Matric**	**Diploma**	**Degree**	**Certificate**	**Masters**	**Grand Total**
Private	12 (22.64)	20 (37.73)	19(35.9)	1(1,88)	1(1,88)	**53 (100)**
Public	17 (23.61)	24 (33.33)	21 (29.16)	10(13.9)	0	**72 (100)**
Grand Total	**29 (23.2)**	**44 (35.2)**	**40 (32)**	**11(8,8)**	**1 (0,8)**	**125 (100)**

4.4.4 Creation of medical records

ISO 15489 – 1:2016 defines records creation as the process that takes place during business transactions. The records handlers responded that the process of records creation in both hospitals begins when a patient arrives. They then interview the patient and document all his/her new information. Records are created and placed in a file receiver register then classified according to the hospital's filing system plan. In public hospitals, manual systems are used while in private hospital both manual and electronic systems are utilized in record keeping. Each of the hospitals has their own criteria used for the creation of patient's records. They were asked to identify the requirements needed when administering records creation. According to the public hospital, they need an ID card, Pension card/child support grant/disability grant, medical aid card and cash to pay for services, postal address and residential address, contact details for next of kin and contact details of the patient. If dealing with an unemployed patient, proof of unemployment

from the Department of Labor is required. Private hospitals require medical information, referral letter by the doctor that sent the patient, patient I.D book, and medical aid details. The survey implies that records creation is done whenever a patient comes for their first visit.

4.4.5 Types of records used

Through observation, the researcher witnessed that the electronic aspect of managing records in the private hospital mostly ends at the creation of information at the reception where the patient opens a file. Only the basic information about a patient is recorded and captured and then physical or paper records are used in the wards in both hospitals. Nurses and doctors make use of paper records for the inscription of doctor's notes. Only one computer was present per ward in public and private hospital. This was used for administrative purposes. The study established that 78 (100%) of the records handlers use paper records in the public hospital. Further, 20 (45.45%) attested to the use of electronic system when managing medical records in private hospital and only 14(31.81%) said the private hospital uses both format to manage records in private hospital. The findings imply that paper records still dominate both hospitals and even though there is technology in the in the private hospital.

Table 4.4: Forms of medical records maintain

Types of hospital	Offsite storage	Paper	Electronic	Both formats	Total
Private	5 (11.36)	5 (11.36)	20 (45.45)	14 (31.81)	**44 (100)**
Public	0 (0)	78 (100)	0 (0)	0 (0)	**78 (100)**
Total	**5 (4.09)**	**83 (68.032)**	**20 (16.39)**	**14 (11.47)**	**122 (100)**

4.4.6 Quantity of records created

The researcher wanted to find out how many records were created in one day and whether the records handlers were able to meet the demand. As shown in Figure 4.9, records handlers were asked to indicate how many medical records are created or received on a daily basis. Using a multi-response question, the respondents were asked to indicate how many records are created in a day and were given a range of up 25 or less than 25 per day. In the public hospital, more than 25 records are created a day 60 (58%) and in private hospital more than 25 records are created

everyday 30 (38%) responded. It was observed that the public hospital creates or retrieves more than 300 records in a day whereas the private hospital creates more than 150 records on daily basis. This implies that more staff is required in the public hospital and in both hospitals more use of technology is still in need.

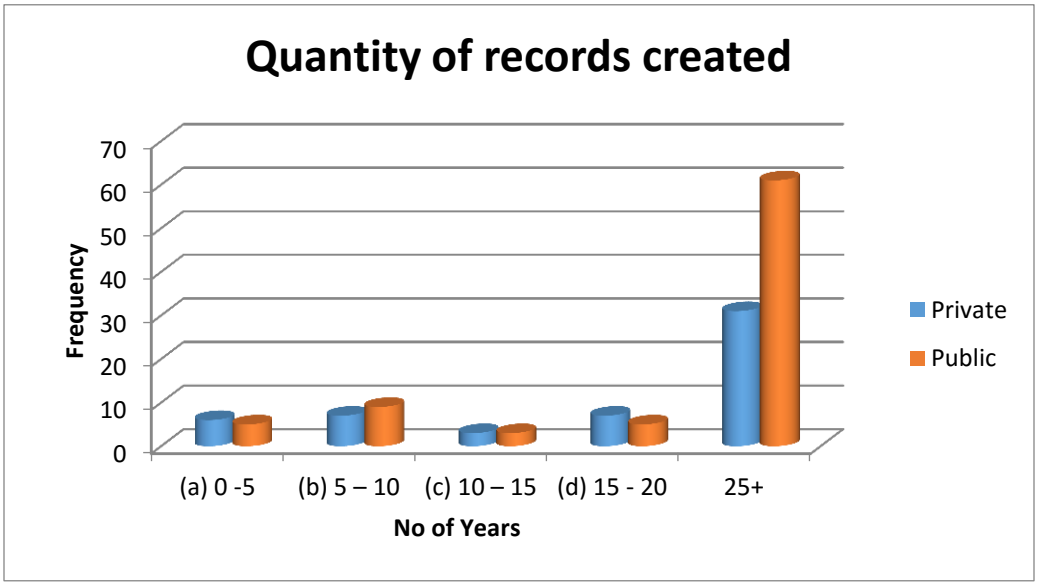

Figure 4.9: Quantity of records created

4.4.7 Classification scheme in place

ISO 15489 -1 Section 9.1 states that each organization should have the classification scheme that works according to organizational needs which suit business needs. The records handlers were asked if they do have a file classification scheme in place. As illustrated in Figure 4.7, the majority of the records handlers in the public hospital indicated that they do have a classification scheme 79 (60%) while only 47 (36%) of the records from the private hospital said they do have a classification scheme. The interviews also revealed that the records handlers feel that more needs to be done in the public hospital to help speed up the system they use which is a manual system. These findings confirm that both hospitals have a classification scheme in place.

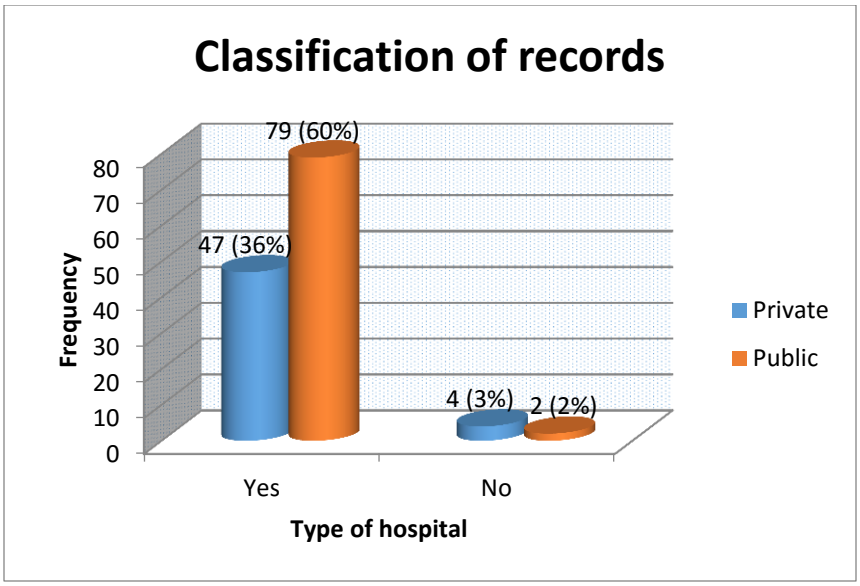

Figure 4.8: Availability of classification of records

4.4.8 Procedure manual in use for medical records

The IRMT refers to these records management tools as standard forms and templates, records classification schemes, records metadata and profile templates, records retention and disposition schedules, security and access classification schemes, search and retrieval indexes and taxonomies, repositories and equipment for the storage of physical and digital records, systems backup and recovery procedures, business continuity plans and vital records plans. IRMT (2004:9) sees the records management tools as a "need to be accompanied by procedural manuals describing when and how staff should fulfill their responsibilities for creating, capturing, classifying, storing, retrieving, tracking, disposing and preserving records." The findings reveal that the records management procedural manual is available at both hospitals. This was confirmed through document review, an aspect of the individual hospital as they take orders in different prospects, the procedure manual from NARSAA 2007 and NHCSA 2003. These prospects give proper guidelines on how records should be handled in both public and private hospitals. The procedure was built in relation to international records management standards, the ISO 15489. The ISO 15489 covers all protocol such as definitions, the creation of records, classification, objectives as well as responsibilities, tools, disposition, retention schedule, electronic records and security.

Using a multi-response list, records handlers were asked about the classification used by their respective hospitals. The public hospital's majority 70 (64.2%) revealed that they used numerical classification and the private hospital indicated that they use numerical as well 39 (35.8%). In the private hospital, records are managed by offsite storage. They classify using numerical and categorized their records according to levels like; level 1, 2, 3 and it helps to avoid damage to records when a disaster occurs. Table 4.5 below 4.5 presents these results. This implies that the South African Records Services and NHCSA do have systems in place to help guide the functioning of records management

Table 4.5: Types of classification (N=138)

Types of classification	Public	Private	Total
Alphabetically	9 (47.4%)	10 (52.6%)	19(100%)
Chronologically	1 (33.3%)	2(66.7%)	3(100%)
Numerically	70 (64.2%)	39 (35.8%)	109 (100%)
Other	3(42.9%)	4(57.1%)	7(100%)
Total	83	55	138 (100%)

4.4.9 File tracking system and tools

The records handlers were asked to indicate if they have a file tracking system in place and which system the hospital uses and they selecting or choosing more than one item which is why is not out of 100%. Further to that, the question sought to determine whether the system is useful to ensure action is taken on time. In addition, the staffs were asked to indicate the challenges that they encountered and if files were not found, what solution was provided. The survey reveals that a file tracking system is in place for both hospitals; however, these hospitals use different functions of file tracking. The public hospital uses a manual system, writing on registers and the private hospital uses an electronic system called "SAP" by the main hospital but the doctor's practice uses a system called "MEDID" as well as the manual system, detailed in Table 4.6. Using a multi-response list, respondents were asked the file tracking system that was used. The majority 107 (76%) indicated that they have a file tracking system while the other 81 (73.63 %) and the other 12 (4.0 %) were just not sure if such a system was available. In the interview, it was indicated that even though the file tracking system was in place, it was time-consuming for

them and this caused delays in the public hospital. The results imply that both hospitals do have a file tracking system in place that is in use by these hospitals and is effective.

Table 4.6: File tracking system (N=140)

File tracking tools	Public	Private	Total	Percentage
(a)Passing Slips	12 (10.90%)	3 (0.1%)	15	100%
(b) Physical search for files	81 (73.63%)	12 (4.0%)	93	100%
(c)File movement cards	2 (1.81%)	2 (0.06%)	04	100%
(d)File census	0 (0%)	1 (3.3%)	01	100%
(i) Color stickers	2 (1, 81%)	2 (0.06%)	04	100%
(ii) Electronic system card	12 (10.90%)	7 (23.33%)	19	100%
(ii) Other:_____	2 (21.8%)	4(1.43%)	04	100%
Total	**110 (100%)**	**30 (100%)**	**140**	**100%**

The use of manual tracking system in the public hospital means carrying a card or blue card to retrieve the files while the private hospital only uses the medical aid, I.D name, and surname. Challenges encountered include physically tracking high volumes (about 300 records) for the private hospital, it was easy to retrieve patients' files since all it takes is to simply type a patient's name or put their medical aid number. The private hospital system is therefore very effective. The researcher's observation was that the tracking system in the public hospital took longer and was not up to standard.

4.4.10 Location and length of retrieval of medical records

The records handlers were asked to indicate what happens when a patient's file is not located in the RMU, and if the answer was 'no', they were asked to explain what measures were being taken to remedy the situation. Figure 4.9 shows that the public hospitals mostly (59%) indicated file were not usually found at the RMU as compared to private hospital (42%). This implies there poor tracking and movement in public than in private hospitals.

The medical records from the public hospital files are located in an administrative office and in the private hospital files are located in the records room and offsite storage. Those from public hospital indicated that it was not a good thing to create a new record if the old one was not found 59 (48%). Some employees indicated that for purposes of continuation of a patient's health record, they make duplicates of records. 42 (32%) of the private hospital employees in the study said it is not a good thing to create a new record when the old one cannot be found while 11 (22%) indicated that it was okay to create a new record when an old one cannot be found for purposes of having a continuation of the health records. One respondent said:

> **Transcript:** *"Interview the patient you can determine where the file was left, you determine. Create a new file"*
>
> *"sibuza ukuthi yagcinanini esibhedlela and yalishiyaphi then we do duplicates"*
>
> *"First interview the patient where was the file last used and still if the file is not located refer to the supervisor but keeping the patient on the loop. If the supervisor takes over, the duplication will be done: a file number will be given to the supervisor"*

It was found during the interview that files are lost by patients when avoiding the consultation fee payment (R35.00). The other issue is that the public hospital has limited space to keep records resulting in the loss of such records. Other patient does even try to steal their files to avoid paying when they come to the hospital. The employees further stated that:

> *"Sometimes we end siwampitshile amafali kwamanye lokhokwenza egcine elahleka engasatholakali"*
>
> **Transcript:** *"due to space being limited we end up putting files in between other files and that causes the file to be misplaced when it's time to look for it, it is not found because we were trying to squeeze it in"*

The private hospital indicated that file loss is not a problem to them; creation of a new file is done every time the patient comes to the hospital. If the records handlers are forced to go back to a file they request it from Metro File using the year and name of the patient. With regards to the doctor's room, they sometimes have the issue of file loss. Some doctors stated that files would be

mistakenly placed in-between other files; in this way, they end up looking for a file for ages. One of the respondents during the interview was asked about file location and they said:

> **Transcript:** "*When doctors request a file we number the whole file so that no pages will be missing and then again when the doctor is finished with the file we check if all the files are not missing, the appointment is made then we request that particular file it can be from our file room or Metro File".*

The implication from this survey is that the public hospital is faced with file loss challenge due to space and theft from users. The private hospital has an effective system in place. Comparatively speaking, public hospital records are located in administrative offices and private hospital records are kept in offsite storage. Figure 4.9 illustrates this.

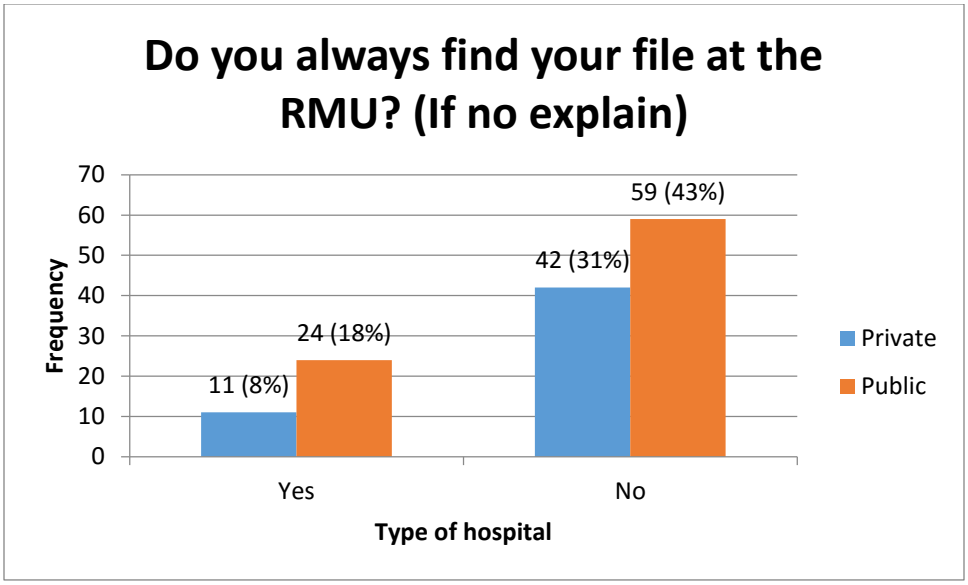

Figure 4.9: File location

The respondents were asked to state how long it takes to retrieve a file from RMU. The majority said it takes more than 15 minutes to retrieve a file. When interviewing the patients they stated that they wait for files for more than an hour depending on the queue; if the queue is long, then they stay one hour and a half; however, the hospital estimated time is 60 minutes. The private hospital indicated that it takes five minutes to retrieve a file but again with them, they always create a new file, the electronic system is used to confirm the details. If a patient visits the hospital for the second time, since an old file has to be retrieved, it takes more than 15 minutes

retrieve a file in private hopital while at the public hospital it takes more than 30 minutes to retrieve a file. Figure 4.10 illustrates this.

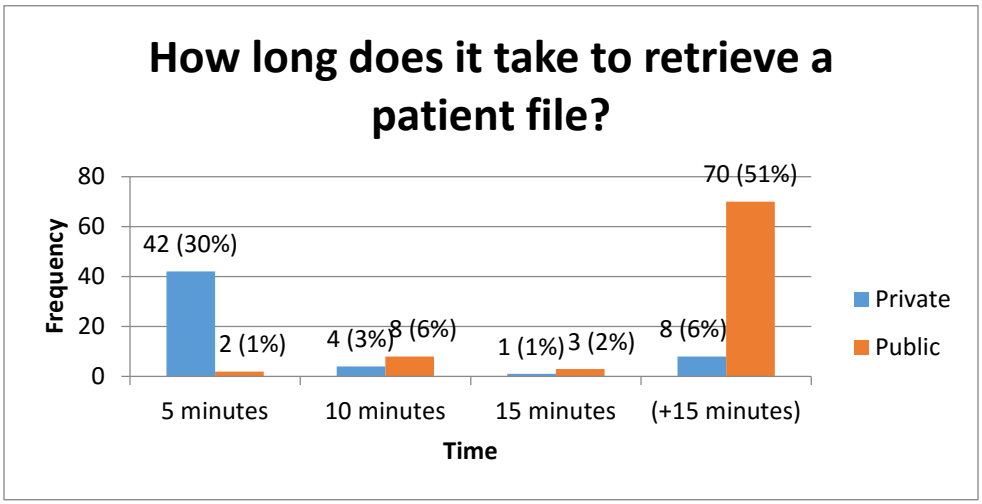

Figure 4.10 Length of file retrieval

4.4.11 Frequency of use of medical records

The respondents were asked how frequently medical records are collected from the other units. 129 respondents responded to this question. The public hospital majority (66, i.e. 79.5%) indicated that they are collected daily while 11 (13.25%) indicated that they were collected hourly and only 3 (3.6%) said weekly and 27 (58.68%) of the private hospital respondents indicated that the records were used daily, 9 (19.56%) said hourly 5 (10.86%) and 5 (10.86%) weekly. Others were not aware how long frequently records are used. Table 4.8 presents these results.

The public hospital agreed that the manual system that they use was effective. Although it was time-consuming for them to retrieve a file because they had to do a physical search. This file search could take more than 60 minutes of a patient's time waiting to receive their files. The challenge that they face is that some files are put within other files because of space . This on its own causes delay and results in ineffective file classification. Carrier cards are used for file retrieval and if lost the duplication process then occurs. During data collection, the researcher witnessed some files being placed on chairs. Such files end up missing or misplaced. The missing of files from the public hospital was observed on a daily basis and patients would have to go back empty handed without their medication or assistance. The picture (Figure4.11) below

reflects what the researcher witnessed with regards to misplacing of files while the researcher was at the hospital. The private hospital only takes 15 to 30 minutes to retrieve files. These results suggest that the collection of files takes place and file retrieval takes more time than it is supposed to in the public hospital. Furthermore, the private hospital file collection takes place on a daily basis when patients are discharged or after their daily visits.

Table 4.7: Collection of medical records from other units N=129

Types of hospital	Hourly	Daily	Weekly	Other	Total
Private	5(10.86%)	27 (58.69%)	5 (10.86%)	9 (19.56%)	46 (100%)
Public	11(13, 25%)	66 (79.51%)	3 (3.6%)	3 (3.6%)	83 (100%)
Total	**16 (12.40%)**	**93 (72.09%)**	**8 (6.20%)**	**12 (9.30%)**	**129 (100%)**

Figure 4.11Records states

4.4.12 Appraisal and Retention schedules of records

Appraisal involves determining what the records are about, beginning with questions like: who creates them and why, what are they going to be used for, what is the function are. Appraisal makes it possible to dispose of records promptly when their continuing utility for business purposes has expired, whether that disposal is by destruction or by transfer for archival

preservation (RMT.199:6). The right of the patient to privacy, security, and confidentiality should be protected at all times. Health records should be stored in a safe place and if they are in electronic format, safeguarded by passwords. Practitioners should satisfy themselves that they understand the NHCSA's guidelines with regard to the retention of patient records on computer compact discs (NHCSA. 2008: 9.1).

> *Appraisal is the process of determining the value and then the disposition of records based on their current administrative, legal and fiscal use; their evidential and informational or research value; their arrangement; and their relationship to other records*(Records Destruction Certificate.2007:21)

The respondents were asked which criteria they used to appraise subject files and 133 responded. Respondents were asked to indicate what they were using to appraise subject files. There are three key values used to appraise, namely: informational, financial and administrative From the public hospital, 34 (64%) indicated that they use informational value to appraise subject files, 24 (48%) others and 10(20%) others use the value of a record. 34 (68%), of the respondents from the private hospital on the other hand look at the informational 12 (28%) consider the value of a record and 2 (4%) consider its functional analysis. The survey indicates that there were no clear tools or function that was known by these records handlers in both public and private hospitals about the appraisal. From the researcher' so bservation, some respondents the level of understanding was very poor when it comes to appraisal knowledge in both hospitals. The NARSAA provides all the function of appraisal. Figure 4.11 presents the results.

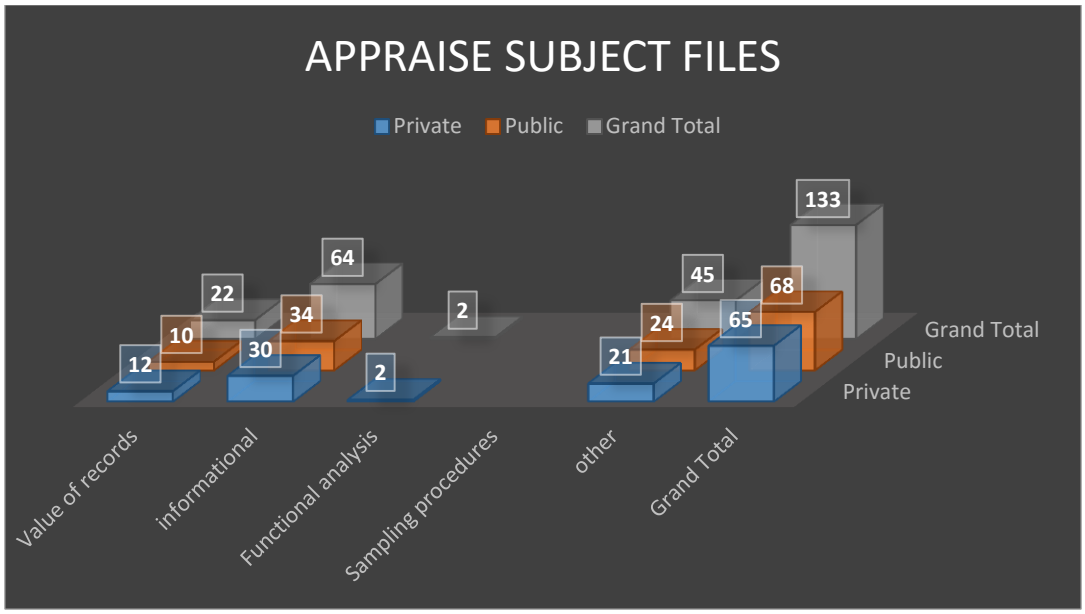

Figure 4.12 Appraised subject files

4.4.13 Disposal or destruction of medical records

The respondents were asked if they do have a record retention and disposal program and 134 responded. Records structure needs to be kept in a well-structured manner or facilities for efficient use. According to (ISO 15489-1, Section 8.3.7) during destruction, it is important to take decisions about process of eliminating or deleting a record, beyond any possible reconstruction) at any time in the presence of records, including during the design stage of records systems.

The respondents were asked to indicate if they have a retention and disposal program. The survey revealed that in the public hospital they dispose of their records after five years. The public hospital disposes of their records by recycling them, unlike before where they used to take them to NARSAA. Not all records are disposed of after five years; they look at the functionality of the records e.g. Records for minors are kept for 21 years and accident files are kept for a longer period (MVAs files). One respondent during the interview said:

> *"With regards to disposition policy we receive it from the national (Department of Health) the policy guidelines state that: records should be kept for five years but then again with regards to those that are regarded as very important like MVA (accident*

files) patients need those files to claim from road accident funds and children files under 5 the record is kept for 21 years. General records are being managed as well."

The private hospital keeps their records for life. They do not dispose of their records. In private hospital, they pay for a commercial storage company called Metro File for the management of their records. The hospital has been in existence for over 25 years and they never disposed of their records even though their policy says they can be disposed of after 21 years. During the interview, what came up was that they felt that the records were too important to be disposed of. One respondent said:

"It might happen that after 15 – 20 years have a back pain and it is unknown where it came from but with that old history file we will able to go back and trace during childhood whether something will relate or course the back pain to be severe then it's make it easy to treat it because we know it not just came from nowhere."

One of the interviewees from the file room stated that:

"…sometimes Metro file is not able to retrieve files over 17 to 20 years like 1991 -1994, the system that was used then was not efficient because even though they were the ones keeping the files but still the registers was being done at the private hospital for them to recall the files that were sent to them some years back but now that this system is no longer in use, the management stops them from keeping file register now those files are hardly recognizable to us. This again shows that these files as it have been sitting over 20 years it needs to be disposed of because they no longer occupy the space for no reason at all and money is being spent for files no longer in use".

At the offsite storage: their response regarding the disposition was that:

"In terms of disposition, the metro file sends a list of files that needs to be destroyed to the relevant organization so that they give a go ahead to destroy the files after 21 years."

Interviews with hospital contractors revealed the following issues regarding doctor's practice on disposal**:**

"…*when it comes to disposition, the majority of doctors do not practice disposition of records because they mostly rely on the electronic system. The interesting part was that some doctors use their homes as a backup for paper records if anything happens within the hospital premises there will be some left. Most doctors keep their files through cabinets, tables and from the floor because space is the issue for them as well. Doctors operate as private practice apart from the hospital they do not use offsite storage to store their records. I think they should back them up because if something happens they lose everything since not all doctors use electronic system some still use paper records old*

files are even torn, the electronic system they use to administrate claims from medical aids.

The researcher's observation indicated that old files are kept in a container of the records handlers which they even refer to as "*Khulukuthu*" meaning "dumping area…"The files stored there are disorganized, full of dust and are piled one on top of the other because they are trying to open a space for the files that are being created every day. This storeroom is situated outside the hospital.

In terms of the Occupational Health and Safety Act (Act No. 85 of 1993), health records must be kept for a period of 20 years after treatment. In the case of minors and those patients who are mentally incompetent, health care practitioners should keep the records for a longer period:

- For minors under the age of 18 years, health records should be kept until the minor's 21st birthday because legally minors have up to three years after they reach the age of 18 years to bring a claim. This would apply equally for obstetric records.
- For mentally incompetent patients, the records should be kept for the duration of the patient's lifetime (NHCSA. 2008 SECT 9.3).

However, section 9.6 in NHCSA (2008) states that there is no clear cut rule that determines the period of how long a record should be kept. It further states that the record can be kept longer than 20 to 25 years. The respondents from the interview were asked if they do have a retention policy for records no longer needed by the hospital. The respondent from the public hospital said that they recycle their records that are no longer in use and they use NARSAA policy in terms of duration of use for retention. As for the private hospital, they retain their records for life; they do not dispose of their records, they use the policy that says records should be kept for 25 years and not a single record has been disposed over 25 years. The offsite storage sends the list to their clients when they see the maturity date has occurred for their approval; they do not just dispose of records, they acquire permission.

As shown in Table 4.8, 58 (72.5%) respondents from the public hospital indicated that they have a retention program in place while 22 (27.5%) said that they have no retention program in place. 36 (67.92%) respondents from the private hospital stated that they have a retention schedule in

place and 17 (32.075 %) respondents mentioned that there is no retention schedule available. This implies that both hospitals have a retention policy that guides the functioning of the hospitals. In the private hospital, their records are kept for life whereas in the public hospital some records are recycled as waste for disposal.

Table 4.8: Retention schedules N=133

Types of hospital	Yes	No	Grand Total
Private	36 (67.92%)	17 (32.075%)	53 (100%)
Public	58 (72.5%)	22 (27.5%)	80 (100%)
Grand Total	94 (70.67%)	39 (29.32%)	133(100%)

4.4.14 Records storage, security, preservation disasters management and recovery of medical records

The respondents were asked if they consider the waiting time adequate during their hospital visits and when retrieving the file. Patients from the public hospital indicated that the waiting time was not satisfactory. The patients wait more than an hour for a file to be retrieved. Usually, it differs with newcomers because the patients coming for the second time are many but newcomers are few so they end up opening new files every time they come. To avoid waiting for hours they open new files. The majority 49 (59.036%) of the respondents in the public hospital pointed out that time spent on opening new files was inadequate while 34 (40.96%) said that the time was adequate. The majority of participants (43 (86%)) from the private hospital indicated

that the time was adequate and 7(14%) of the respondents opined that the time was not adequate. The results are presented in Table 4.8.

One of the interviewees said:

> **Transcript:** *"Inkinga nje esinaso is'space ngobangikhulumanawe asazi sobekakuphi u 2016 asiphathike u 2017 ngoba onkelamafayela ala ekakabisesimeni sokuthi angakhishwa khonasizothola i-space"*
>
> **Translation:** *"The problem we have is the space, as I'm speaking to you we do not know where we are going to put 2016.I don't know about 2017; it is even worse because all these files are not yet matured enough to be taken out so that we will have space"*

Based on the researcher's observation, some files were even put on chairs and they were mixing them because of space which again caused confusion and misplacement of files from the RMU.

A respondent from the interview said:

> **Transcript**: *"Lesi sibhedlela sesisidala lokho kwenza sigcine sekunetha lahlalakhona amafayela umanje singanwetshwela isbhedlela singajabula kakhulu manje enye into asizigqumeli ukuthi sinwetshwelwe kodwa I department yiyo ebonayo ukuthi ifuna ukusinwebela isbhedlela ileya kwa Public Works."*
>
> **Translation:** *"This hospital is very old which makes it leak from the roof and this thing affects our files, our wish is to have a bigger space for our records and that will make us happy if we have the powers to tell the Department of Public Works that our hospital needs renovation but the thing is, it is not up to us to decide, it is the department that sees that this hospital needs renovations then they come and do it."*

The private hospital has a similar problem as the public one regarding space. The fact that space is is an issue explains why they end up transferring the files to Metro Files. The doctor's rooms have the same problem of space. The worst part for them is that they do not even have file storage facilities and their files are placed on counters, on the floor and on top of cabinets. The respondent from the interview said:

> **Transcript:** *"Space is our biggest challenge but we are planning to extend the hospital to have a bigger space that will be able to accommodate our files and they might even stay longer than 3 to 1 month."*

Table 4.9 Records, storage, retrieval waiting time from the RMU

Type of hospital	No	Yes	Grand Total
Private	7 (14%)	43 (86%)	50 (100%)
Public	49 (59.036%)	34 (40.96)	83 (100%)
Grand Total	56 (42.10)	77 (57.89%)	133(100%)

4.4.14.1 Recovery plan used for disaster management

Disaster is described as an unexpected event that occurs in a business or organization. The respondents were asked if they have experienced any disaster. Disposition is the action taken with regard to not so current records following their appraisal. These actions might include transfer to the State Records Centre for temporary storage; transfer to the State Archives for permanent preservation; maintaining records in the agency; reproducing on microfilm; or destroying the records (Destruction of Public Records, 2007).

The public hospital reported that they had never experienced any disaster. The majority of the respondents, 12 (15.18%) indicated that pest attack may occur and 8 (16.66 %) said flooding can destroy records. The researcher observed that the hospital had once experienced leakages during the rainy season. This forces them to move records around when it is raining. During the interview, the respondents were asked if they had any disaster management systems in place and they reported that they only have fire extinguishers and horse pipes in place and nothing more. In the private hospital, they reported that they have disaster management plan and their system is linked to the fire department. They mentioned that they have fire extinguishers and they have a team that always does a system check within the hospital; if anything goes wrong, the alarm alerts them. The offsite storage is used by private hospital, for the offsite storage to make sure that the records within their premises are protected they link all their systems with fire department. Furthermore they manage their records, classify them according levels to prevent them from being destroyed at once when disaster strikes and they have alarm system for alert

4.4.15 Security

The respondents were asked to state how medical records are secured in the RMU. 123 responded to this question. Hospital records are also subject to confidentiality of information relating to individual patients (RMT. 1999:23).

The response was that they use burglar guards for the protection of their records in a records room. The public hospital uses paper records; therefore, for the protection of records, they use burglar guards. The private hospital uses burglar guards as well, security cameras and passwords to enable one to access records. For the electronic records, they have a backup system in place to back up the records which require passwords and security checks of identification. The private hospital uses offsite storage as backup for their records. Doctors do not have security in place; they only rely on the hospital security. There are no security measures in place for paper records. Those that use the electronic system mentioned that there is no backup system in place and they are afraid of theft. The majority in the public hospital (43 (61.42%)) indicated that they use burglar proof room for security, 23 (32.85%) indicated other measures and 4 (5.71%) indicated that a strong room is mostly used as a security measure for medical records. Cameras and authorized entry are used in the private hospital. 23 (18.85%) in the private hospital indicated other, 11 (21.15%) indicated special room and strong room and 7 (13.46%) indicated burglar proof room. The hospital also made use of security guards in the hospital.

Table: 4.10 Security measures in public and private hospital (N=122)

Types of hospital	Strong room	Special room	Burglar proofed room	Other	Grand Total
Private	11 (21.15%)	11 (21.15%)	7 (13.46%)	23 (44.23)	**52 (100%)**
Public	4 (5.71%)	23 (32.85%)	43 (61.42%)	0 (0%)	**70 (100%)**
Grand Total	**15(12.29%)**	**34 (27.86%)**	**50 (40.98%)**	**23 (18.85%)**	**122 (100%)**

4.5 INTEGRATION OF ICTS IN THE MANAGEMENT OF MEDICAL RECORDS IN PRIVATE AND PUBLIC HOSPITALS IN THE UMHLATHUZE AREA

Electronic records benefits can be shared widely and can be accessed and used by several people at the same time, even if they are in different places. In an environment where resources are scarce or distances are great, the ability to provide access to information without the boundaries of time or space can dramatically improve service, increase information sharing and enhance operations (IRMT. 2009:7).This is why the implementation of ICTs in the organization can help speed up the process when it comes to service delivery. The researcher wanted to find out about the systems in place that are being used to manage medical records by these two hospitals and their long-term plans to computerize. The study also sought to find out if the electronic system already exists, who is responsible for its implementation, staffing, and user competencies and if the system does not exist, whether ether are any future plans to implement it. The findings are divided into these themes:

- Level of integration of ICTs in the records management functions
- Type of ICT used in records management functions
- Uses of ICT in records management functions
- Availability of ICTs for records management functions.
- Training in ICTs for records management
- Challenges in the Contribution of ICTs in records management

4.5.1 Level Integration of ICTs in the records management functions

The deployment and level of integration of information communication technologies (ICTs) can help in speeding up the work process used in an effective and productive manner in records management functions. However, to implement technology usually takes time. (IRMT, 1999:48). The respondents were asked to indicate the challenges of using an electronic system. Respondents from the public hospital pointed out that they do not use any elaborate electronic health system for record management; instead they rely largely on manual systems and therefore could not cite any obvious challenges. In most of the wards, however, computers are used by

ward clerks and doctors only for administrative purposes. Doctors and ward clerks mentioned that there is only one computer in each and every ward used to register patients in a spreadsheet. As for doctors they use the computer only to view scans from the x-ray department.

The private hospital does have ICTs in place. Respondents mentioned that they encounter challenges when power outages occur as they cannot work. Further to that, when the network is down most systems cannot function. They use ICTs to view patient details, to indicate the last visit of the patient to the hospital and the medication prescribed. Furthermore, in doctors' practices, they lack backup systems for electronic records management. One of the respondents in the interview said:

"The system that we have always requires to be updated at most times…"

These findings indicate that the public hospital is still steeped in the manual system and is far behind when it comes to the application of ICTs in records management. Thus, paper still dominates the operations of the public hospitals and the depth integration of ICTs is still a higher requirement in both public and private hospitals.

4.5.2 Types of ICTs used in records management functions

Respondents were asked to indicate the type of ICTs they have in their hospital. Respondents from the public hospital indicated that they have scanners, printers, personal computers and elaborate internet infrastructure. The private hospital respondents mentioned that they have scanners, printers, personal computers, fax, the internet, and intranet and windows domain. The response rate from the public hospital was very low due to lack of knowledge regarding ICTs in record management as they do not mostly use computers; in the private hospital, however, the respondents indicated that they had most of the ICT equipment in their premises. This implies that the public hospital clearly has a lower adoption rate of ICTs for records management. They use ICTs only for minimal or basic administration purposes. On the other hand, the private hospital is much more equipped with technology and the utilization of ICT is very high as they use ICTs for file retrieval, data storage and for file classification as shown in Table 4.11.

Table 4.11 Use of ICTs in public & private hospitals (N = 180 respondents choosing more than one used ICT)

Used ICT in hospitals	Frequency	
	Public	Private
	Total	Total
Scanners printers	34	40
CPU	0	10
Monitors	40	40
Printers	30	15
Fax	10	20
internet explorer	15	20
Intranet	0	11
Windows server 2003& 2005,10,7	0	0
Exchange server 2003 & 2007	0	0
Microsoft office	0	15
Windows domain	0	10
Total	**129**	**181**

4.5.3 Uses of ICTs in records management

The IRMT (2008) argues that it is usually useful to make a distinction between 'application' or 'business' systems (such as human resource and financial management systems) that have a well-defined structure and data management procedures, and 'office systems' that are used to generate and hold unstructured single digital objects, including e-mails and attachments, word processed documents, spreadsheets, scanned images of hardcopy records (IRMT, 2008:1). They posit that there are two types of ICT systems – application and office systems need to be integrated. For example, technically, human resource systems could be interfaced with electronic documents (such as correspondences such as appointment letters) being created during human resource management processes (IRMT, 2008:1). In this study respondents were asked the extent to which ICTs were integrated into medical records management functions. Respondents from the public hospital indicated that they use ICTs for communication and administration purposes only. In the private hospital, they use ICTs for data storage, communication and data processing. In both hospitals there was no elaborate electronic document and records management system. The private hospital however has an electronic system that helps them to perform faster retrieval of patient records on time also makes it easy to trace errors in the

recording of entries. . The private hospital staff further stated that electronic system assists them with preservation of records on appropriate media. In addition, despite this use of office electronic systems, there are currently no institutional procedures that guide the filing, arrangement and disposition of electronically created documents by staff using desktop computers or appropriate records management software. It is clear that the integration of ICTs in records management functions in both public and private hospitals was low. It goes without say that adoption of ICTs is required in both hospitals.

4.5.4 Availability of ICTs for records management

In chapter 2, adoption of ICTs was reviewed regarding records management extending to the integration of medical records managemen.t, The respondents were asked which type of ICTs are in place in their work place. The following tools were mentioned. The respondents were allowed to choose more than one type of ICT. The study revealed that monitors, scanners, printers, and the internet were used in both the public and private hospitals but that the private hospital also had internet explorer, Microsoft office, windows domain and central processing units (CPU) were used for full functionality. However, even though the public hospital uses ICT tools, these were not fully utilized in records management, whereas in the private hospital, their ICT tools were utilized in the admission area for records management purposes, retrieval and data storage.

Table 4.12 Availability of ICTs in public & private hospitals (N = 180 allowed to choose more than one availability)

Availability of ICT hospitals	Frequency	
	Public	Private
	Total	Total
Scanners printers	34	40
CPU	0	10
Monitors	40	40
Printers	30	15
Fax	10	20
internet explorer	15	20
Intranet	0	11
Windows server 2003& 2005,10,7	0	0
Exchange server 2003 & 2007	0	0
Microsoft office	0	15
Windows domain	0	10
Total	**129**	**181**

4.5.5 Training in ICTs for records management

Respondents, specifically record handlers, were asked if they had received training from their hospital regarding electronic medical records management. 66 (58%) respondents from the public hospital denied that they received any special training and 17 (24%) agreed that they did receive training. The majority of respondents 34 (48%) from the private hospital agreed that training was provided to them and 26 (38%) denied ever receiving any special training.

The ISO 15489:2016 states that all procedures should be documented to help facilitate how records handlers should manage records and its users; compliance with the standards is also encouraged by the ISO. The IRMT 2004 emphasized that all procedure manuals need to be compiled using the manual description procedure to help the staff to perform better using stipulated guidelines. This, however, implies that proper training on and orientation in ICT use for records management is really required in both hospitals, to help them function efficiently.

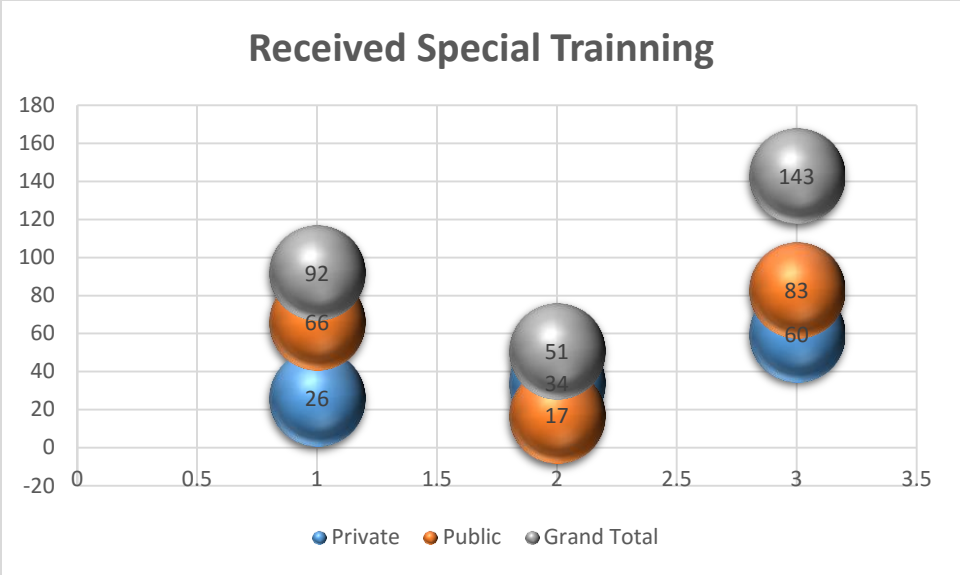

Figure 4.13 Training in ICTs for records management

4.5.6 Challenges in the contribution of ICTs in records management functions

Respondents were asked what challenges they encountered in the use of ICTs in records management and the respondents chose more than one ICT type. The majority indicated that shortage of software (50 (27.47 %.)) is a factor; software shortage is followed by hardware (44 (24.17%)) and inadequate standards and procedure for ICT adoption. Respondents from the private hospital indicated that they are short of hardware systems; they would like to have more to help improve service delivery. The table below reveals that in the public hospital, they are in need of technology, well-trained staff to be used for ICTs and security measures. The survey revealed that in the private hospital, their technology is well utilized in accordance with records management. A further revelation was that ICT helps the private hospital to be more effective and efficient in their daily activities.

Table 4.13Assistance required from the RMU N = 180 (selecting more than one contribution)

ICTs Contribution to Service Delivery	**Type of Hospital**	
	Public	Private
Shortage of software	50 (27.47%)	0 (0%)

inadequate standards and procedure for ICTs adoption	38 (20.87%)	0 (0%)
Inadequate security measures	20 (10.98%)	1 (11.11%)
Shortage of hardware	44 (24.17%)	4 (44.44%)
Inadequate financial resources	19 (10.43%)	1 (11.11%)
Shortage of skilled human resources	11 (6.043%)	2 (22.22%)
Total	182 (100%)	9 (100%)

4.6 EFFECTIVE RECORDS MANAGEMENT PRACTICES FOR EFFICIENT PUBLIC SERVICE DELIVERY RECORDS STANDARDS AND SERVICE DELIVERY IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

Service delivery is a very politically sensitive term in South Africa. Service delivery refers to visibility and accountability of the service received by people whether in government or in the private sector. In the private sector, because people pay a lot, they legitimately have high service expectations whereas in government hospital this is very poor because not so much attention is given to public service delivery. Various government structures are in place to help improve service delivery to South African people. For example, Batho Pele is an approach to get public servants committed to serving people and to finding ways to improve service delivery. The Batho Pele White Paper (Section 1.l.1.) stated that:

> "*Public services are not a privilege in a civilized and democratic society, they are a legitimate expectation."*

In investigating this issue in some detail, the following sub-themes were used:

- Compliance with procedure tools in accordance to service delivery
- Required assistance from the RMU
- Challenges encountered when in hospital
- Satisfaction towards records management at the hospital
- Frequency of file receipt and follow up visit

4.6.1 Compliance with procedure tools in accordance with service delivery

Respondents who are recorded handlers were asked if they thought the current records management situation in their department aided service delivery. Further to that, patients were interviewed to find out if they were happy with the service being provided to them by these two hospitals. The records handlers from the public hospital reported that they thought the current procedure tools aid service delivery, even though it was time-consuming. These respondents mentioned that they were understaffed; sometimes it makes it difficult to service the community. The researcher observed that only two people worked at a time servicing many people in public hospital. This made it difficult for the employee to serve all patients waiting in the queue. In the private hospital the records handlers responded that their current records management situation aided service delivery in that the system in place was very efficient such that it takes less than 30 minutes to serve patients. In doctors' rooms, they used one file whenever the patient comes and they retrieve their file using the electronic system which only takes about five minutes.

The public hospital responded that sometimes they get the information they are looking for but it is not always the case with (6 (12%)), 11 (22%) said they receive it all the time. 3 (6%) respondents said they never find what they are looking for. 1 (0.1%) reported that they sometimes find what they are looking for. In the private hospital, some 13 (26%) said they get their files all the time, 3 (6%) said sometimes, and others that mentioned something else other than mentioned above 3 (6%). These findings show that poor service is still an issue in public hospitals where far more time is spent owing to the use of the manual system. Figure 4.14 illustrates this.

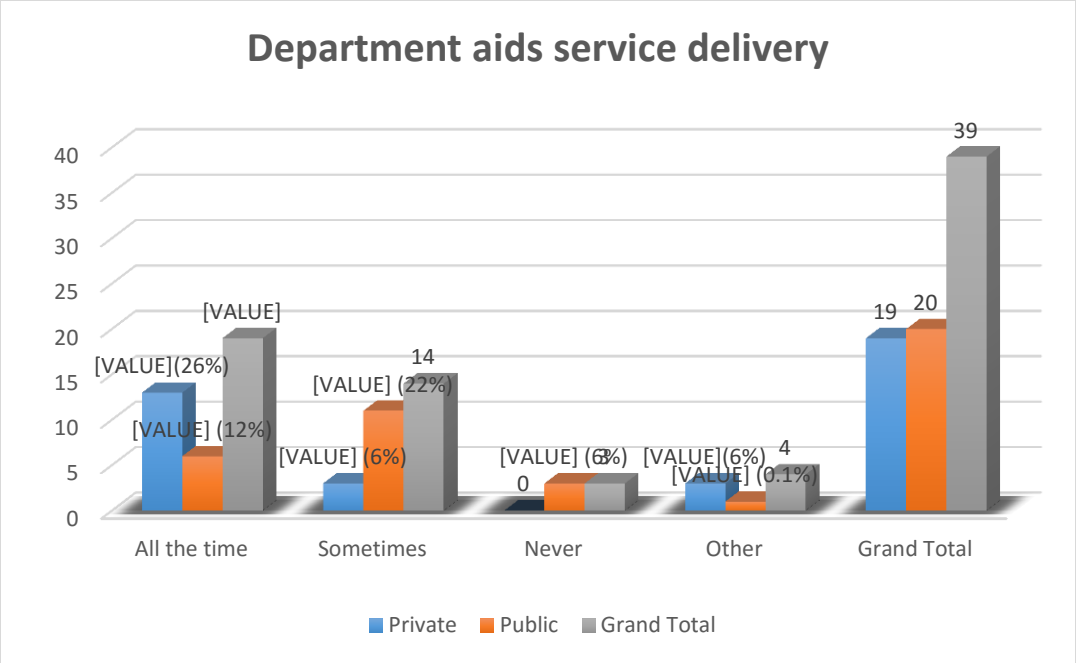

Figure 4.14 Obtaining needed information from the hospital

4.6.2 Required assistance from the RMU

The respondents were asked how long it normally takes to be assisted from the RMU. The majority 13 (26%) from the public hospital mentioned that it takes hours, 4 (8%) said it takes days and the last 3 (6%) said it takes minutes from the public hospital. 12 (24%) respondents from the private hospital responded that it took a few minutes for them to get assistance from the RMU; followed by 5 (15%) who said it took hours and the last 3 (6%) said it took days. These results show that the public hospital still has to improve their services. During the interview, some respondents indicated that 3 to 4 hours sometimes pass without any help being provided.

Clearly, it takes a long while for patients in the public hospital to get the required information on time. This is similar to the private hospital as one of the patients indicated that:

> "*The only hiccup we have is from the wards when admitted we don't get service on time and you stay days in the dark, in terms of knowing what is wrong with you while they are busy saying they are running tests. Other times they end up wanting to give me something that or medication not required by my condition because they don't know what is wrong with me and now they ended up guessing thinking that maybe my condition is tuberculosis related without confirming it because the test was saying I do not have tuberculosis".*

Figure 4.15 illustrates this kind of predicament in both public and private hospitals.

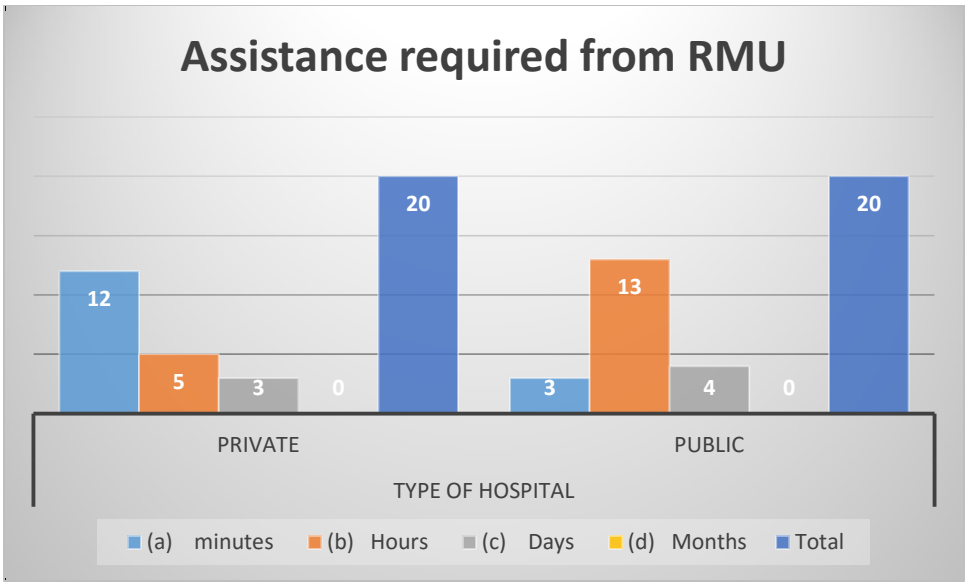

Figure 4.15 Assistance required from the RMU

4.6.3 Challenges encountered when in hospital

The majority of patients said that they encounter various challenges when they are in government facilities and little was ever said of private hospitals mistreating their clients or their users. The public hospital respondents indicated that they come across all sorts of challenges when it comes to the hospital. They indicated that from the OPD their files are lost, torn or are sometimes missing. Some of the respondents in the public hospitals indicated that:

> **Transcript**: *"Mina ifayela lami engalimalangalo engoziniyemoto lalahleka akazengikwazingisho ukuclaimer from road accident fund ngoba ngangingasenayo imininingwano ngokulimalakwami"*
>
> **Translation**: *"My file went missing from the hospital, I was supposed to use it for claim at the Road Accident Fund because my file was missing I did not have the file to back me up that I was really involved in a car accident, I was unable to claim because there was nothing to back up my story"*
>
> **Transcript:** *"Uthi uza esibhedlela kodwa uthole ukuthi bayaphuza ukuthola isifo sakho esikuphethe minanje nginenkinga yesifo somdlavuza webele kwabathatha iminyaka emithathu ukuthi bathole ukuthi ngina nalesifo sesingidlesangiqeda isifo"*
>
> **Translation:***"I've been coming to hospital several times being sick but they couldn't tell me what was wrong with me, it took them over three years to finally find breast cancer while the time was already gone I have lost a lot of weight due to this sickness and I nearly died"*

Transcript: *"Njengoba ngikhuluma nawe nje ngilahlekelwe ifayela lami alitholakali nakhokonke okuyimniningwane yami yokugula, nginamaphilisi engiwalandayo njalo ngenyanga manje sezomele ngiqalephansi yonkinto ngihlolwe ngoba angiwazi amaphilisi igamalawo, phelamina angifundanga ngane yam"*

Translation: *"As I'm talking to you my file has gone missing they can't find it with all my particulars or medical history of my chronic medication that I collect every month now I have to start over, do tests because I don't know my medications names, I'm not educated".*

In the private hospital one respondent said: -

"The issue we come across is when waiting for an authorization number which sometimes they find that the system is offline so we have to wait longer because our patients cannot proceed without it"

Another said:

"Medical aids take long to pay the hospital, that makes it difficult for us as patients to continue getting service from the hospital because it accumulates on the previous balance and sometimes the medical aid pays insufficient funds then we have to pay the remaining amount"

In the private hospital, one of the patients indicated that:

"the only hiccup we have sometimes is in the ward when admitted we don't get service in time and you stay days in the dark in terms of knowing what is wrong with you while busy saying, they running test they ended up wanting to give me something that or medication not required by my condition because they don't know what wrong with me and now they ended up guessing thinking that maybe my condition is tuberculosis related without confirming it because the test was saying I do not have tuberculosis".

This implies that in the public hospital, there are still various challenges when it comes to service delivery, for example: torn files, missing files, delay in diagnosis, missing folios etc. In the private hospital, the findings reveal that they need to inform their patients about their diagnosis without delaying. From the researcher's observation in public hospital, the file room was not conducive for medical records to be stored there the room had high temperatures and improper file classification system.

4.6.4 Satisfaction towards records management in hospital

The majority of respondents from the public hospital said that they were not happy with the way their records were managed at the OPD (Out Patient Department). The OPD is responsible for all files in the hospital. It is where records are managed by clerks. The respondents said that they

found their files covered in dust, torn or sometimes missing; they did not get answers as to where their files were located. They also required patients to buy themselves folders when their files were full. They said it was the patients' responsibility to buy folders for their files so that they can prevent them from getting lost. In the private hospital, they do not use old files; for each and every time patient who comes to the hospital, they create a new file for them unless there is an issue that requires a follow up from the old file. If this is the case, then they request for the file from Metro Files. With regards to the doctor's practice, they too experience a similar issue of torn files and space; however, no patient has reported the loss of a file.

4.6.5 Frequency of file receipt for follow-up visits

Users were asked during a follow-up visit about where they got their files. The users from the public hospital indicated that their records were normally kept at the Out Patient Department (OPD); others call it the front desk. The hospital administrator mentioned that all files are collected from other units by the clerks daily so when patients come they pick them up from the OPD. There is a sign placed at the window indicating that follow-up patients use the second cubicle which is sometimes an issue because patients with no serious conditions end up opening new files and having to wait in long queues. In the private hospital, there was no restriction regarding the place of collecting files; all patients coming for the first or second visit used the same reception or consultation room. However, the patients visiting for the second time only went for confirmation of personal information and to receive new folders for consultation or visit to the hospital. This survey reveals that carrier cards in public hospital are still in use and effective but anyone can just use the carrier card when retrieving the file. With regards to the private hospital there are no specific instructions on where to go for a follow-up consultation to access records; the patient is only required to produce a medical aid, ID or just say their names for identification.

4.7 SUMMARY

This chapter presented research findings from a semi-structured questionnaire, interviews and researcher observations. The researcher analyzed data according to the objectives of the study.

The study revealed that the awareness of NARSAA and ISO standards was very poor among the records handlers in both hospitals. In addition, the training of records management staff was also lacking. Furthermore poor records management practice affected lack of service delivery, especially in the public hospital. Also, the depth of ICTs implementation is still required by both public and private hospital. The chapter also examined the effectiveness of records management in both hospital and showed that there were several challenges encountered by the two hospitals and among these included: poor storage. However, a positive finding is that there is file classification in private hospital, and, the policy on the management of records exists. Chapter five will then discuss these results.

CHAPTER FIVE

DISCUSSION AND INTERPRETATION OF RESULTS

5.1 INTRODUCTION

The previous chapter presented and analyzed the findings of the study. This chapter discusses and interprets the findings presented in chapter four. Sarandakos (1993) states that data interpretation helps make findings clearer, articulating the issues mentioned in Chapter 1 and explaining the issues alluded to in the problem statement. Furthermore, is the chapter interprets and discusses the findings in relation to the literature. (Nengomasha, 2009:344). Overall, the main objective of the study was to carry out a comparative study of the management of medical records in public and private hospitals in the Umhlathuze area. The interpretation of data is based on the objectives of the study and the themes derived from the four objectives formulated:

- Level of compliance with the set regulatory framework in the management of medical records in public and private hospitals in Umhlathuze;
- Current records management strategies, programs and systems in records management in the context of service delivery in public and private hospitals in Umhlathuze area;
- The integration of ICTs in the management of medical records in public and private hospitals in Umhlathuze area;
- Effective records management practices for efficient public service delivery in public and private hospitals in Umhlathuze area.

5.2 LEVEL OF COMPLIANCE TO THE SET REGULATORY FRAMEWORK IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

Literature review and data presentation articulated in Chapter two, three and four, elaborated on facts about records management models and the need to comply with regulatory framework of desired record and information environment. This is discussed based on the following sub-themes:

- Policy on Management in public and private hospitals
- Legal and policy framework on records management in public and private hospitals

- Records management policy in public and private hospitals
- Responsibilities on Records Management in public and private hospitals
- Policy Types of Formats in public and private hospitals

2.3.2 Policy on management in public and private hospitals

Records management is a very complex and multi-disciplinary that requires skillful people to implement it (Shepherd & Yeo, 2003). Each organization needs to be guided by a certain policy to run efficiently. Chachage and Ngulube (2006:10) accentuate that many countries have legislation that requires businesses and organizations to manage their records effectively and more efficiently for easy access and retrieval. The study revealed that both the public and private hospitals do have a policy in place to govern hospital dealings or management. The study clearly indicated that the Department of Health is the one that governs hospitals in the government sector. The private hospital is run by a group of shareholders in accordance with the Health Department.

5.2.2 Legal and policy framework on records management in public and private hospitals

The ISO 15489 is responsible for ensuring standardization on development policies, program and procedures to be followed in any organization. The ISO 15489-1:2016 affirms that the regulatory framework and policies are the drivers and act as a guide to records management. The study has revealed that the level of compliance when it comes to standards is very poor for both public and private hospitals. The lack of awareness of standards was identified by the study in both public and private hospitals. No detailed policies are available to govern medical records in public hospital. However, a detailed policy was provided on behalf of private hospitals, commercial records center that manage records on behalf of the private hospital. Furthermore, the survey confirms the findings of earlier studies that there still exists poor compliance to records management. Authors such as IRMT (2008) Nengomasha (2009) Ngoepe (2008) Keakopa (2006) and Kalusopa (2011) all concur that this is widespread on the African continent. In addition, the survey revealed that the legal functions of the National Archives and Records Service of South Africa are less known and their services as custodians of public records are not made known to both the public and private hospitals. This results in poor guidance by NARSAA

in terms of medical records management. The study further revealed that very little has been said about the management and integration of e-records as well as the issue of the preservation of digital records in both hospitals in their policy. In an earlier study, Marutha (2011:183) also affirmed that government facilities do not utilize their technology to speed up services rendered. In the same vein, Motlhoadi (2014:78) found that there was no policy framework in accordance with records management in Botswana.

5.2.3 Records management policy in public and private hospitals

Kennedy and Schauder (1998:29) posit that a records management policy is "the official charter for performing all records management functions". The authors further observed that a records management policy should be clear and should outline records management functions in relation to the organization's records keeping requirements. As a standard for best practice in records management, ISO 15489-1 (2001 section 6) specifies that organizations should "establish documents, maintain and promulgate policies, procedures" to guarantee that "its business need evidence and accountability and information about activities it met". The ISO 154889-1 (2001; section 5) stipulates that a records management policy and procedures of an organization should demonstrate the application of the regulatory environment to their business processes. In South Africa, the National Archives Records Services of South Africa (NARSAA) gives guidance on how records should be taken care of.

The survey revealed that public hospitals do have a policy on management that covers the management of both paper and electronic records. However, in essence, the policy only drives the management of paper records and not electronic records. This seems different from the private hospital that actually attempts to implement the management of both paper and electronic records even though the depth still remains low, slow and evolving. Further, while it would be prudent as per ISO 15489 that institutions should review their policies; this is almost absent in both public and private hospitals. As echoed by Kennedy and Schauder (1998), government bodies and their staff need to be aware of legal and regulatory obligations for them to give adequate evidence of their fulfillment towards regulatory requirements in records management function. This, however, implies that all records stakeholders should be aware of the regulatory framework governing their work. The consequences of this as shown in the literature has been

that the management of medical records has been fraught with lack of clarity of policy framework leading to continued poor health delivery of services as evidenced by an earlier study by (Marutha (2011) that reported similar findings regarding the lack of policy framework in the management of medical records in Limpopo public hospitals.

5.2.4 Responsibilities of records management in public and private hospitals

Sphepherd and Yeo (2003) state that records management is regarded as a multi-complex discipline that requires expertise and clear responsibilities assigned. Mnjama and Wamukoya (2006) also state that records managers need to be well qualified to perform efficiently.

The current survey revealed that there was a lack of skills across both public and private hospitals in the management of records. In the public hospital, for example, records handlers have had to find their feet through work experience while in the private hospital there were at least some training provided for some selected staff members though most training was done many years ago. Furthermore, the study revealed that records handlers at the front desk (receptionists) in the private hospital were the ones who had been provided with some recent training, unlike the records handlers that are supposed to actually manage the records for the whole cycle. This seems to have been outsourced to an external stakeholder that manages the records. Yet, records management principle and practice underscores that these primary records handlers need to understand their responsibility in the management of medical records in order for them to deliver the service. The ISO 15489 avers that standardization should be developed for all records management to serve its primary function of a hospital, clinic or other health care facility which is to provide quality patient care to all, whether an inpatient, outpatient or emergency patient. Yet this was absent in both hospitals as this study would attest.

Similar studies elsewhere in the public sector such as Nengomasha's (2009:116) in Namibia was faced with the same situation of lack of training of staff or records handlers. Other studies had done in South Africa in the health sector have revealed the same: Khoza (2008), Marutha (2011), Katuu (2015) all found a similar situation in the public health sector.

5.2.5 Policy on types of Formats in public and private hospitals

The current study shows that paper records are still regarded as the dominant formats in both the public and private hospitals. The policy is not clear on how paper and electronic records generated should be managed. Unlike the public hospitals, the private hospitals use a system called "SAP" to manage their records in an electronic form but were not clear on the issue of custody of digital records that are kept beyond a 20 year period. The lack of record creation policies has been persistent in records management literature in Africa. Earlier studies such as Kemoni (2007:290) found that in the records management for public service delivery in Kenya, 56% of records management units did not have a records creation policy, with 68% saying they did not have any activities that were the basis for records creation. In South Africa, studies focusing on the management of records also allude to similar findings (Marutha, 2011; Pyrene, 2015).

5.3 CURRENT RECORDS MANAGEMENT STRATEGIES, PROGRAMS AND SYSTEMS IN RECORDS MANAGEMENT IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

. The findings are presented and articulated under the following themes:

- Structure of record management system
- Responsibility for the management of records
- Level of qualification in general education and records management
- Creation of medical records
- Types of records used
- Quantity of records created
- Classification scheme in place
- Procedure manual in use for medical records
- File tracking system and tools

- Location and length of retrieval of medical records
- Frequency of use of medical records
- Appraisal and Retention schedules of medical records
- Disposal/Destruction of medical records
- Challenges faced in management of medical records
- Records storage, security and preservation of records, disaster management and recovery

5.3.1 Structure of record management system

Green (2011:10) argues that centralized records are whereby records are put together in one place. The centralized filing system for medical records is also recommended by the International Records Management Trust (1999:23). It states that hospitals should employ qualified medical records managers to manage centralized systems or records. The study revealed that centralization was used in the public hospital but the private hospital used decentralization. The researcher observed that some records handlers do not even know what system is in place in their hospital as long as they work. They do not pay much attention to anything else. The study revealed that the public hospital records were centralized in the OPD; the OPD is where patients first go when coming to the hospital and all records are kept there. Furthermore, the OPD is a representative of the hospital, if patients get a bad experience at the OPD; they blame the whole hospital as they work as a face of the hospital. Pyrene (2015:109) also found that at the Victoria Hospital, they centralize their records.

In the private hospital, the study revealed that the records management system is decentralized as they had offsite storage while the doctors use centralization where everything is stored in the doctor's rooms. Furthermore, records from the private hospital were temporarily stored in the file room or records room for only one to three months before being transferred to offsite storage. Pyrene (2015) also found that Victoria hospital kept their medical records in the OPD and that public hospital patients make their first stop at the OPD for file creation and retrieval. Hospital records are also subject to confidentiality of individual patients (RMT. 1999:23). Medical records are about patients' lives, and so confidentiality is very important when dealing with lives.

However, it is important to note that both the public and private hospitals faced severe problems in terms of storage of physical records which leads to lack of confidentiality through the misplacement and loss of files. There was also no clarity on the security procedures for the medical records stored centrally and those stored in the doctor's rooms at the hospital.

To make sure that files are properly managed, the private hospital uses the off storage facility at Metro File. However, no co-ordination clearly existed between the off storage record centre and the management of current records. The IRMT (2003:46) argues that: "It is the responsibility of the records center to notify the transferring agency that it must carry out a review. The records center will do this by sending a Records Centre Disposal Form, to which a duplicate copy of the relevant transfer list or lists has been attached." When it comes to doctors, the argument was that doctors were contractors in the hospital and as such, they could still keep their records for their practice while the off storage facility stored semi-current records.

The POPI act is responsible for strengthening the working relationship between commercial records and an organization. The study further found that the Protection of Personal Information Act (POPI) was being mentioned a lot by management in relation to the use of offsite storage use. The study revealed that records management in the hospitals was guided by the POPI Act. The POPI Bill no. 9, 2009 is responsible for:

- *The personal information: that is, any information capable of identifying an individual, such as medical records, tax records, census records, bank records, information on purchasing habits and property ownership. The purpose of POPI Act Bill is to lay down guidelines regarding the collection, storage and processing of personal information by the public and private sectors.*

This Act guides the hospitals on how their records should be handled by the institution which gave them the storage. The purpose of this Bill is to design a coherent approach to the protection, classification and declassification of government information or private sector. Similarities were identified by authors such as Kerry (2006); Norden (2004); Pyrene (2015) regarding the use of the manual system in public hospital and the use of registers when doing file tracking. The findings of the current study are the same as these scholars that the current record management system is time consuming."

5.3.2 Responsibility for the management of records

According to IRMT (1999), an organization should have people who are responsible for overseeing the overall records management units. The current study revealed that both the public and the private hospital did not have nor were not aware who should be responsible for the management of records. From the public hospital, it was pointed out that all medical records were administered by the administrative office (OPD). Furthermore, other records handlers indicated that they were not aware of who took care of records. Various studies across the African continent e.g. Kalusopa (2011), Moloi (2006), Mosweu (2012), Ramokate & Moatlhodi (2010), Tshotlo (2009) and Moatlhodi (2014) also confirm the lack of capacity to manage records in most sectors in Africa.

5.3.3 Level of qualification in general education and records management

The literature revealed the importance of good records management and relevant qualification to ensure efficiency at all times in records management. Good medical care relies on well-trained records management cadre and equipment (IRMT, 1999:11). Marutha (2011:179) also argued that the lack of training in records management can be a big contributor to file loss in most hospitals. Furthermore, Shepherd and Yeo (2003) believe that well-trained records handlers will enable work to be efficient or be of high standard.

The study found that, in terms of the general highest level of qualification, in both public hospital and the private hospital the dominant qualification was a diploma. The survey also revealed that most people who are hired to handle records are not trained in records management. Further the study showed that in public hospitals, most of those that received training got it over 20 years ago, whereas in the private hospital, they had received training in the last 5 years. The interview revealed that the area with the most trained people at the private hospital is that of recorded creators who receptionists were since they were seen as the face of the organization. Thus even though the number of qualified personnel is high in both hospitals the truth remains that the records handlers have irrelevant qualifications for records management. It is taken for granted that anyone can just manage records with proper training. Ngulube (2010) also emphasized that

relevant skills are required by those working in records management. This survey also confirmed that training is required by records handlers in both hospitals. Similarly, Kemoni's (2007:343) study on records management and service delivery in Kenya showed that most of the records management personnel in the public sector were undertrained. The study showed that 31 (19.7%) held a diploma in archives and records management and a large number, 78 (49.7%), had no training in archives and records management. The study also expressed concerns from senior ministerial officers regarding the lack of training and training opportunities for records management personnel. In another study, Manyambula (2009) also established that most of the records management personnel in the Tanzanian public sector were under-trained leading to lack of professionalism in records management and public service delivery.

5.3.4 Creation of medical records

ISO 15489 – 1:2016 defines records creation as the process that takes place during business transactions. The records life cycle is the process that facilitates the records creation as a whole, the function is known to record creation and receipt. Hospital records require confidentiality in their handling (IRMT, 1999:24). Records must have certain attributes: they must be authentic, complete and usable. ICT systems must, for example, have the capability to generate or capture the required 'metadata'. The metadata gives individual records their context within the business process that generated them, and it links the records together so that they can serve their purpose in documenting individual cases within the business process (IRMT, 2008:30).

The records handlers revealed that the process of records creation in both hospitals begins when the patient arrives. They then interview the patient and record all new information. Records are created and placed in a file receiver register then classified according to filing system plan. In the public hospital, manual systems are used while in private hospital both systems are utilized. Each hospital has its own criteria used for the creation of patient's records.

It was further revealed that records are created at the OPD by clerks and they used a new folder whenever a new file is created in public hospital. Furthermore, the study revealed that certain documents and information is required when doing file creation: I.D book, pension card if you are a pensioner, contact details of relatives, referral letter with nature of sickness and physical address. The researcher observed that at the second visit, patients produce a blue card (carrier

card) that has a unique number for file retrieval and if the patient loses that card, the hospital will be unable to retrieve a file and anyone can retrieve a file if they have this card.

In the private hospital, when creating a new file, a patient I.D book, medical aid, and referral letter indicating a referral to which doctor to treat a patient stating the problem and biographical information are required. The result shows that no card is given to patients after opening a new file and the retrace or retrieval process is done through the electronic system using a patient's particulars. With regards to hospital contractors, i.e.doctors, they do not create a new file each time a patient comes. They require a patient's information and a medical aid. When a patient comes for the second visit, the patient need only say their names or produce a medical aid.

In terms of capturing records in recordkeeping systems, observations and interviews revealed this was largely managed by the administrative staff, mostly receptionists and secretaries who had some office practice qualifications or experience. Kalusopa (2011:230) argues that "while this may be a useful temporal measure, it does not support effective records management practice."

5.3.5 Types of records used

The public hospital maintains large paper records while the private hospital maintains both paper and electronic records. Through observation, the researcher witnessed that the electronic aspect of managing records in private hospital mostly ends at the creation of information at the reception where the patient opens the file. The private hospital uses the electronic form of records keeping even on retrieval of medical history e.g. x-rays are stored on CDs.

5.3.6 Classification scheme in place

The IRMT (1999:253) defines classification as the process of identifying, arranging, and archiving records in categories according to logically structured conventions, methods and procedural rules represented in a classification system. The IRMT further explains that classification organizes records into categories, based on the functions and activities the records represent, so that decisions about their organization, storage, transfer and disposal may be made on a category-wide basis, not file by file or item by item. The World Health Organization

(2006:62) argues that if medical records are not correctly classified, the record may not be found when needed.

The classification scheme used by the public hospital is a numerical classification scheme arranged according to years. The public hospital uses the physical aspect of management of records; however, it has become an issue for them due to the use of the physical strength for records retrieval even though they are classified. From the observation, the public hospital used registers for indexes and file tracking. IRMT (1999:254) agrees with the researcher that classification helps organize records for easy retrieval. Classification assists with the disposition of records if classification is done accordingly.

The private hospital classified their records according to a numerical system. The records were only stored for 3 to 6 months, but due to problems of space, now they are stored for one month. After a month the records are transferred to an offsite storage where they are also classified numerically and according to different levels of subject arrangements. The IRMT (1999:79) points out those levels of arrangement and description are two integrated practices designed to make records and archives physically and intellectually available for use. When arranging records or archives, the institution must recognize the internationally accepted principles of *respect des fond or respect for provenance and original order*. The function of the records center is to hold semi-current records and make them available for use until the date of their disposal (IRMT, 1999:32). Accordingly, the IRMT (1999:32) further emphasizes that the records center should be safe, secure, clean, efficient and economical. It should be capable of holding all designated semi-current records in all media and it should be able to provide a dependable retrieval service. The records center is not a place for permanent retention of records. However, the private hospital used the offsite storage as a permanent place for storage of records. During the interview, what was revealed was that for over 25 years since the hospital was established, none of the records had been disposed of or transferred to the National Archive of South Africa. This is so even though the policy guidelines state that they should be disposed of after 25 years. However, they chose not to dispose of them and believe that the "*records should be kept forever for referral purposes"* as revealed in the interviews.

5.3.7 Procedure manuals and tools in use for medical records

The IRMT refers to these records management tools as:*standard forms and templates, records classification schemes, records metadata and profile templates, records retention and disposition schedules, security and access classification schemes, search and retrieval indexes and taxonomies, repositories and equipment for the storage of physical and digital records, systems backup and recovery procedures, business continuity plans and vital records plans*. The IRMT (2004:9) sees the records management tools as a "need to be accompanied by procedural manuals describing when and how staff should fulfill their responsibilities for creating, capturing, classifying, capturing, storing, retrieving, tracking, disposing and preserving records."

The findings reveal that the records management procedural manual and tools are available in both the public and private hospitals. However, from document review, each individual hospital derived their procedure manual and tools from NARSAA 2007 and NHCSA 2003 prospectors for public and private hospitals respectively. These prospectors give proper guidelines on how records should be handled in both public and private hospital. The procedures are built in relation to international records management standards, the ISO 15489. The ISO 15489 covers all protocols such as: *definitions, the creation of records, classification, objectives as well as responsibilities, tools, disposition, retention schedule, electronic t records and security.* This means that the different guidelines that govern the public and private hospital have to take policy prescriptions on how to manage records as per the Department of Health and Private Hospital Committee and the Health Department. This, therefore, represents some conflicting ways in the manner in which records are managed. There is therefore a need to harmonize records management for consistency in standards and practice in the country.

5.3.8 File tracking system and tools

Tracking tool is considered as the tool guide used to keep track of files whereabouts to prevent them from loss. This means that a well-installed tracking file system makes it easy for the file to be retrieved. Usually, a manual file records tracking system can become a problem for records retrieval (Marutha, 2011:101). Thurston (2005) warns that a weak file tracking system results in

more quantities of records being kept in larger amounts and this accumulation makes it difficult to retrieve essential records.

In this current study as it was found that in the public hospital the manual file system was used for managing records while registers are used to track the movement of the files. Carrier card or blue cards were used for retrieval of records in public hospital. The study found that up to 300 records were created and the use of the manual system made it hard to manage the tracking and retrieval process. The researcher observed that the clerks had to interview patients to reconstruct their biographical information when file loss occurred. This made it difficult for the clerks to be able to track the files using the manual system.

However, in the private hospital, where an electronic system is used, for a file to be retrieved requires a name or production of I.D book and medical aid. In this way, the records handlers did not need to reconstruct the patient's information each time a patient came to the hospital. The "SAP" system is also integrated and interlinked with other private hospitals making referral of patient records much easier. The study thus clearly showed that the file tracking system in the public hospital needs improvement while in the private hospital; the file tracking system was efficient.

Earlier studies such as Pyrene (2015), Marutha (2011) and Katuu (2015) all concur that the flow of file tracking was not good in most public hospitals in South Africa and also suggested that electronic systems be installed.

5.3.9 Length of retrieval of medical records

The delay in filing retrieval is a contributor to poor service delivery; public service is determined by the efficiency of quality care and knowledge of work. Marutha (2011) and Ngulube (2010:10) both argued that time keeping in records retrieval is very important and faster retrieval of records shows a good response to records request to confirm proper records management keeping. Proper file tracking determines the amount of time that one will be spent on records retrieval. Ngoepe (2012) and van Der Walt (2009) assert that records management is one of the major processes required ensuring good public records.

The records handlers were asked to state how long it took to retrieve a file from the RMU. The public hospital used manual or paper records in its management. Marutha (2011:101) argued that manual records management system can be hectic and problematic for record retrieval. This, however, was illustrated by records handlers that records retrieval in the public hospital took more than 15 minutes a file. The patients stated that they wait for more than an hour for their records to be retrieved. In the public hospital, the estimated time is 60 minutes. Chikuni and The private hospital indicated that it took them five minutes to retrieve a file but again with them, they always created a new file to confirm the details if a patient was coming for the second time. The creation of a new file would take more than 30 minutes as observed by the researcher as they had to wait for an authorization number from the medical aids database that is integrated into their electronic system. As for the doctors' room, the patients who have appointments do not spend much time, unless the doctor is busy with an emergency in the hospital. The overall findings in the private hospital revealed that file retrieval is very effective and is not time-consuming to its users. Kerry (2006); Marutha (2011); Pyrene (2015); Norden et al. (2004) all discussed the issue of decentralization and centralization as well as the issue of file tracking as a contributors to time spent when doing file retrieval.. Furthermore, Pyrene (2015:103) sees medical records as the cornerstone of the quality and efficiency of patient care during follow-up visits or hospitalization as they contain a complete and accurate chronology of treatments and future plans for care. However, the current study indicated that the majority of records handlers did not have formal training when it comes to records management. This became one of the contributors to file loss or missing file in hospitals and other related organizations as they do not have a clue on how records should be managed.

The Public hospital indicated that a new file is created when an old one is not found; they also revealed that the creation of the new file is time-consuming is and a waste of stationary. The private hospital revealed that it is a good thing to create a new record when the old one is not found for purposes of continuity of health. Marutha (2011:178) notes that lack of education and training may also contribute to missing files, especially if records management is not an interesting career for some of the officials.

On the other hand, the private hospital made sure that their staff received training when they were hired. Furthermore, the study indicated that the private hospital does not usually have the

issue of loss of files because whenever they finish with a file, they usually close it. However, if something forces them to go back to the file, then they request for it from the Metro File (the records center) using the year and name of the patient. With regards to the doctor's room, they sometimes have challenges whereby the file is put in another file by mistake, and then they end up looking for the file for a long time. The study showed that the location of files is time-consuming in the public hospital due to their improper filing system and classification. The physical search leads to poor service delivery, whereas in the private hospital, the retrieval system is very effective in locating a file. This implies there is a need for improvement in the public hospital.

5.3.10 Frequency of use of medical records

A tracking tool is considered as the tool guide used to keep track of files' whereabouts to prevent them from being lost or missing. Shepherd and Yeo (2003) state that the best way to prevent file loss or missing files is to document each and every file taken out especially the paper records.

Shepherd and Yeo (2003) state that the best way to prevent file loss or files missing are to document each and every file and its users once taken out especially paper records.

The findings of the study established that in the public hospital, records are searched for physically and registers are used for file tracking. Most personnel indicated that they use physical search, followed by passing slips and electronic system cards. The register is used to document each and every file taken out by officials from the hospital or users. However, the records handlers complained that the system was time-consuming. This system of file tracking not only does file tracking but it also assists with work being done for the day, to document how many files were retrieved and how many created. Pyrene (2015:101) also found out that Victoria Hospital in Eastern Cape has tracking and tracing measures in place to safeguard the protection of medical records against any loss or misplacement. The private hospital does have a file tracking system which is the electronic system called "SAP". "SAP" is used to create files as well as to do file tracking. In the doctors' room they use "MEDID" to do file tracking. The private hospital records handlers indicated that they physically search for a file, followed by the electronic card and color stickers. These are also used to do file tracking. The private hospital only uses the electronic system when it comes to file tracking. They stated that this system is fast

and very effective to use; even in the doctors' room they use an electronic system to do file tracking for their patient's records and they use registers as well as a back-up for them. Marutha (2011:172), Chikuni (2008) and Pyrene (2015:96) recommended the use of the electronic system in their findings. The private hospital is going the line of using the electronic system as it is really beneficial to them. It is fast and less time consuming. The public hospital can adopt one or two things from the private hospital on how they do things regarding the file tracking system. Overall, the survey revealed that the manual system is dominant at both hospitals. Even though the electronic system is employed by the private hospital, the use of paper is still in existence.

5.3.11 Quantity of records creation

The researcher wanted to find out how many records are created in one day as well as understand how the hospitals were able to meet the demand of servicing the people. The volume of records can lead to difficulty in records retrieval, which eventually would result in a client waiting too long for health service (Marutha, 2011: 172). Pyrene (2015:66) also attests that public hospitals are flooded by people wanting free service. Other scholars such as Marutha (2011:197) and Ngulube (2010:23) have also bemoaned the poor service and long waiting times for service in government hospitals. The longer patients wait, the poorer the service delivery. Pyrene (2015: 101) also discussed the factors leading to longer waiting periods and that the manual records management system can be hectic and problematic for record retrieval.

The study revealed that the amount of records created in a public hospital is quite extensive compared to the private hospital. The private hospital creates more than 200 records a day and the issue they have is staffing as they handle the entire work. The researcher observed that two records handlers on duty were assigned to handle 200+ user thus causing delays. The public hospital dealing with high volumes of records being created also determined the level of effectiveness to its users. Staff who are very strong mentally, are trained are able to deal with work pressure.

The private hospital created 150 records or more a day. They always create a new record when a patient comes to the hospital. After one to three months, the records or files are transferred to an offsite storage called the Metro File. The Metro file works hand in hand with the private hospital in Richards Bay. Further to that, they also assist the hospital staff with training on how to

manage records. The private hospital response was that the records handlers tried,by all means to be involved in all processes until the end of the day to make sure management of records are well taking care of. To make sure that quality of records created stay the same and prevent unauthorized entry, the users had to sign to acknowledge everything and that they understood. The private hospital made sure that the users understood everything they being treated for and they valued their client as they bring money to the hospital. Another thing, the researcher's observation was that at private hospital was that they were too concerned about the reputation of their hospital. Pyrene (2015:66) pointed out that public hospitals have to contend with huge volumes of medical records due to the high number of people visiting these facilities. Therefore it was revealed that records management is very poor due to waiting period of more than 60 minutes at the public hospital.

5.3.12 Appraisal and Retention schedules of medical records

Determining what the records are or what they will be once they are created, who creates them and why, how they relate to the creating agency's functions and to other records, how they are used, when and by whom involves appraisal (IRMT, 1999: 5-6-7). Appraisal makes it possible to dispose of records promptly when their continuing utility for business purposes has expired; that disposal can be through destruction or transfer for archival preservation (IRMT.199:6). The right of the patient to privacy, security and confidentiality should be protected at all times. Health records should be stored in a safe place and if they are in electronic format, they should be safeguarded by passwords. Practitioners should satisfy themselves that they understand the HPCSA's guidelines with regard to the retention of patient records on computer compact discs (HPCSA. 2008: 9.1).

Appraisal is the process of determining the value and then disposing of records based on their current administrative, legal and fiscal use; their evidential and informational or research value; their arrangement; and their relationship to other records (Records Destruction Certificate.2007:21)

In public hospital, the survey indicated that they look at the record's value, its informational content, as well as its financial and administrative value. Most personnel consider the informational value of a record before doing the appraisal to determine if the record is worth

keeping. The public hospital recycles all records that are over five years; these are no longer taken to the National Archives. They work hand in hand with a company called “Impact” that does recycling. Records of the Motor vehicle accident (MVA) type are not disposed while records for people under 18 years can stay for 21 years without being disposed of.

The study found that the private hospital did not dispose of their records but stored them permanently in offsite storage since they see their records as valuable and worth keeping forever. One respondent even indicated that they believe records are the go back thing when medical history is required because that history can be found in the stored records. When appraising the file, the study revealed that little is known about appraisal by records handlers; from lack of awareness to detailed procedure on how to implement it.

5.3.13 Disposal, Retention and Destruction of medical records

In terms of the Occupational Health and Safety Act (Act No. 85 of 1993) health records must be kept for a period of 20 years after treatment. In the case of minors and those patients who are mentally incompetent, health care practitioners should keep the records for a longer period:

- For minors under the age of 18 years, health records should be kept until the minor’s 21st birthday because legally, minors have to be up to three years after they reach the age of 18 years to bring a claim. This equally applies for obstetric records.
- For mentally incompetent patients, the records should be kept for the duration of the patient’s life (HPCSA. 2008 SECT 9.3).

Section 9.6 in HPCSA (2008) states that there is no clear cut rule that determines the period that a record should be kept; it further states that a record can be kept for 20 to 25 years.

The respondents from the public hospital said they recycle their old records. They use NARSAA policy in terms of duration of retention. As for the private hospital, they retain their records for life. .Although they use the policy that says records should be kept for 25 years, however, not a single record has been disposed of over 25 years. Thus, when the maturity date has occured for disposal at the offsite storage facility (Metro File), approval is requested by sending a list of records due for disposal to the client (private hospitals) for final approval to be granted.

The respondents were asked to indicate if they had a retention and disposal program in place. The public hospital said they dispose of their records after five years through recycling them. For those records with enduring value, they are appraised after 21 years and taken to the National Archives. The accident files that have legal value are kept for a longer period at the hospital.

Most of the doctors do not dispose of records because they mostly rely on electronic systems that back-up the records for preservation. Interestingly, some doctors use their homes as back-up for paper records so that if anything happens within the hospital premises they would still have some back up. The records are either kept in their cabinets or tables or on the floor because of lack of space. Doctors operate private practices and do not use offsite storage to store their records. It is important to note that not all doctors use the electronic system as some still rely on paper records. Most of these are old files; some are even torn. However, doctors use the electronic system for administration tasks such as claims from medical aids.

The researcher observed that old files are kept in a container which the records handlers refer to as *"Khulukuthu"*.The files are stored in a disorderly fashion and are often full of dust and piled up with no space in sight. This would state of affairs calls for improvement.

5.3.14 Records storage, security and preservation of records

Kemoni (2007) notes that inadequate storage of current and semi-current records has the capability to delay speed in decision making as records retrieval would take long. He further posits that inadequate records storage equipment could increase the deterioration of records and thus affect their access and use. Both the private and the public hospitals have a similar challenge of space. The private hospital ends up transferring their files to Metro Files. The doctors' rooms do not have storage space and the worst part is that they do not even have file storage; files sit on counters, floor and cabinets. The researcher observed that both hospitals need improvement in terms of records management. Scholars such as Marutha (2011) and Kerry (2006) also noted the challenge of storage space in South African hospitals.

The respondents were asked to state how records were being secured in the RMU. According to Kalusopa (2011), organizations should have formal guidelines regulating that is permitted access to records and under what circumstances. Hospital records are also subject to confidentiality as they have information relating to individual patients (RMT. 1999:23).

The study found that the hospitals mostly use burglar guards for the protection of their records in a records room. The public hospital uses 43 burglar bars for the protection of their records and they have security personnel in place for the whole hospital. The private hospital, on the other hand, uses burglar guards as well, security cameras and passwords for electronic systems. For the electronic records, they have a backup system in place to back up the records which require passwords in order to access them.

The study revealed that the private hospital uses offsite storage as backup for their records. For doctors, they do not have security in place as they only rely on the hospital security with no security measures in place for paper records. Marutha (2011) & Pyrene (2016) found that there were security measures in place at the Victoria Hospital as well as Limpopo Public hospital.

5.3.15 Disasters planning, management and recovery

Disaster is described as an unexpected event that can occur in a business or organization. The respondents were asked if they had experienced any disasters. Disposition is the action taken with regard to non-current records following their appraisal. These actions might include transfer to the State Records Center for temporary storage; transfer to the State Archives for permanent preservation; maintaining the records in the agency; reproducing on microfilm; or destroying (Destruction of Public Records, 2007).

The public hospital reported that they had never experienced any disasters though the majority said they can encounter such disasters as flooding and fire since there was no disaster plan in place. The researcher observed that the hospital experienced leakages. This caused them to move around records when it rains. During the interview, the respondents were asked if they had any disaster management systems in place and they reported that they only had fire extinguishers and horse pipes.

However, the private hospital has a disaster management plan. Their system is linked to the fire department and they have fire extinguishers. They have a well-trained team that always does the system check within the hospital. The study found that offsite storage that manages the private hospital's semi-current records is also linked to fire department. In addition, their file storage is separated according to levels so that not everything is destroyed when disaster strikes. Further, they have an alarm to alert everybody in case something is wrong.

5.3.16 Challenges encountered in management of medical record

The public hospital indicated that they are mostly faced with torn files, missing files, dust, leakages from the roof to file room and file duplication. This results in poor service. Missing files disrupt the continuity of patients' health records. The public hospital is faced with an issue of space, as of now they do not where to put 2016 files and the issue is very big to such an extent that 4 to 5 spaces were left on the shelf. The private hospital is faced with the issue of space as well. Doctors are also faced with the similar issue of space. The private hospital is better off than the public hospital because they have a backup plan in terms of having a file offsite storage that has a contract with them. The hospital only stores records for one month due to space. During the interview, it came out that doctors were even afraid of file theft due to the condition they were stored under. Some of the doctors came up with the idea of taking files home with them as an alternative backup system. The Medical Protection Society (South Africa, 2012) encourages that health care institutions should have a role plan that is well structured on records management and file classification that is effective for tracking of medical records when issued out to users or borrowers.

5.4 INTEGRATION OF ICTS IN THE MANAGEMENT OF MEDICAL RECORDS IN PRIVATE AND PUBLIC HOSPITAL INUMHLATHUZE AREA

Electronic records benefits can be shared widely and they can be accessed and used by several people at the same time, even if they are in different places. In environments where resources are scarce or distances are great, the ability to provide access to information without the boundaries of time or space can dramatically improve service, increase information sharing and enhance operations (IRMT. 2009:7). The study presents the findings on the objective about integrated technology use in managing medical records. The objective is divided into these themes:

- Level of integration of ICTs in the records management functions
- Type of ICT used in records management functions

- Use of ICT in records management functions
- Availability and Implementation of ICTs for records management functions.
- Training in ICTs for records management
- Challenges in the Contribution of ICTs in records management

5.4.1 Level of integration of ICTs in the management

According to Kalusopa (2011:258), technologies and product solutions are there to provide the enterprise-wide capability to capture, classify, store, retrieve and track e-records, regardless of the format whether paper, email, web pages, digital documents, database transactions.

The public hospital revealed that they predominantly use paper records and their adoption of electronic record system is low if not almost non-existent. The study also revealed that there is little integration of ICTs in records management functionalities in that ICTs are used for retrieval of x-rays and for communication purposes only. The systems used that were in place were computers used to view scans from the x-rays department. Each ward has only one computer per ward for general administration. Marutha (2011:173) also found that electronic medical records were not fully maintained in the Limpopo provincial hospitals since the electronic system was not fully utilized to cover all the details of patients for electronic medical records.

The private hospital has ICTs in place although they cited challenges encountered such as power blackout and network downturns. Unlike the public hospitals, their electronic health system can view patient details with clear integration to medical aid systems. Doctors lack backup systems for the electronic records management. Marutha (2011), Pyrene 2015 and Katuu (2015) all recommended the use of electronic system for records management as this will help improve health service delivery.

5.4.2 Type of ICT used in records management functions

Kalusopa (2011) asserts that it is the user's acceptance and use of ICTs that defines its success or failure. Electronic records depend on technology. This gives us a clear understanding on how records are created and managed by computer hardware and software but requires that personnel

should be urged to adopt them. Therefore, this implies that qualified staff should manage electronic records systems. (IRMT, 2009). IRMT (2007) recommends that there should be regular awareness rising as part of the change management process most importantly to win staff to buy-in when organizations implement e-records management initiatives. When respondents from the public hospital, were asked to indicate the forms of technology or ICTs that used, they indicated that Scanners, printers, monitors and the internet. The private hospital respondents mentioned that they have scanners, printers, monitors, fax, and the internet, and intranet and windows domain. The response from the public hospital was very low in terms of ICTs use due to the lack of knowledge regarding the type of ICT infrastructure that should be used in records management function. In private hospital, the respondents indicated that they have most ICT equipment in their premises. This study shows that though the public hospital may have some ICTs in place, these are not used for records management purposes, but for administration. On the other hand, the private hospital is much more equipped with technology and they are being utilized in the right way such as: file retrieval, data storage and for file classification.

5.4.3 Use of ICTs in records management functions

According to IRMT (2009), one of the rewards for ICT adoption is that a lot of people in an organization can have access to electronically stored records at the same time, they can carry out their duties without being delayed by lack of information. They also have improved access to more up-to-date information, given that they can access ICTs such as e-records storage facilities or databases directly and not have to wait for materials to be filed in a central registry and then locate and retrieve them when needed (IRMT, 2009). IRMT (2009) further posits that the utilization of ICTs improves information handling and allows for the quick retrieval of records. Ultimately, a record handler can make knowledgeable decisions quickly and competently, contributing to the effectiveness of the organization. This current study affirms that while the public hospital was very slow in adopting ICTs, the private hospital is much more exposed to ICTs. The public hospital, as much as it is aware of the purpose of ICT, lacks implementation.
The researcher did observe ICT equipment used. Also, there was not much ICTs installed in the wards. Earlier studies such as by Pyrene (2015) also found that though digitization was said to help improve records management function of the public hospital in the Eastern Cape, understanding its purpose for integration remained low.

5.3.4 Availability and Implementation of ICTs for records management functions

Electronic records require system planning and proper management systems to enable it to function at its best. The public and organizations think electronic systems are the answer to every challenge they come across with paper records management. but without proper implementation, it cannot help the system to work efficiently. The IRMT (1999:10) defines electronic records as a record that can be manipulated, transmitted or processed by a computer. With proper installation and high security in place, electronic records can make records retrieval, access and management easy.

The survey revealed that the availability and implementation of ICTs in the public hospitals remains low in that ICTs are used for communication purposes and for doctor's x-ray retrieval only. The reception, ward and the record management unit had only one computers.

In the private hospital, there was availability and robust use of ICTs for data storage, communication, classification, and data processing. The study further revealed that an electronic health system helped them provide efficient service to patients. However, there are still indications of lack of in depth knowledge of the systems that improve service delivery. Thus, for example, in the wards, much needs to be done to widen the use of the electronic health system. Further, some doctors still use paper records to document doctor's notes; nurses deal with lots of paperwork the same way as in the public hospital. Nurses also complained that the machines in some wards are old and slow. Marutha (2011:173) and Pyrene (2015:131) also found that the electronic medical records were not fully maintained in the Limpopo provincial hospital and Victoria Hospital since the electronic system was not fully utilized to cover all the details of patients. However, it is evident that government hospitals are still behind when it comes to implementation of ICTs for health delivery.

5.4.5 Training in ICTs for records management

The respondents were asked if they have received any special training related to records management to manage digital records. The study revealed that those who were employed more than 15 years ago did receive training. Those employed less than 15 years had not received training, implying that training was no longer provided to public hospitals.

From the interviews, it came to light that the National Archives and Records Services of South Africa had not been involved in assisting the hospitals with records management as before.

The private hospital offered records handlers special training through the offsite commercial storage facility. However, the training offered for those that specifically coordinate records in the records room and the receptionists was limited to using the system for the opening of files in a system called "SAP". This involved biographical data restoration, coding not specifically on digital records management.

Marutha (2011:179) also revealed that lack of training in records management could be seen as a contributing factor to poor records practice such as missing files. In an organization where the staff competency and skills are not developed, the survival of the organization is not assured. This moreover shows that the public sector still needs more room for improvement when it comes to training of records handlers. King (1997:658) further argued that the well-trained staff will ensure that the organization will lead to the advanced stage of operation, growth and quality of work. Shepherd and Yeo (2003) believe that well-trained staff and records handlers will do the work efficiently and raise the standard of service delivery.

5.3.6 Challenges in the Contribution of ICTs in records management

Electronic records require system planning and proper a management system to enable it to function at its best. The public and organizations think the electronic system is an answer to every challenge they come across to do with paper records management. With proper implementation, the public hospital could help the system to work efficiently without any problem. IRMT (1999:10) defines electronic records as a record that can be manipulated, transmitted or processed by a computer. Therefore, with proper installation and high security in place the use of electronic records can make records retrieval, access and management easy.

The study revealed that the public hospital uses ICTs for communication purposes and for doctor's X-ray retrieval. The survey found that when doctors retrieve X-rays from computers, they use certain passwords to be able to retrieve those X-rays. The study found that the same computers used for X-rays were also used for administration by the ward clerks in the wards. This process was taking place in the wards and each ward had one computer that was used for both processes.

The private hospital uses ICTs for data storage, communication, classification and data processing. The study further revealed that the use of the electronic system helped them to perform fast and be on time at most times. Furthermore, it made it easy to trace faults. The respondents further stated that the electronic system assisted them with information preservation and information retrieval. The private hospital indicated that they were short of hardware which is required to help improve service delivery. The researcher observed that the continued use of the electronic system in the wards was not effective. Only one computer existed in the wards and it was observed that, this computer was for administrative purposes. The records handlers did confirm that the computers in the wards were for administrative purposes only. Furthermore, doctors still used paper records to document their notes and nurses dealt with a lot of paperwork the same way as in the public hospital. The study revealed that nurses complained about the old medical machines in some wards that they had to use. This, therefore shows us that the private hospital was not so perfect; they too need to improve on some things.

Marutha (2011:173) and Pyrene (2015:131) found that electronic medical records were not fully maintained in the Limpopo provincial hospital and Victoria Hospital since the electronic system was not fully utilized to cover all the details of patients for electronic medical records. This shows that government hospitals were still behind when it comes to the implementation of ICTs.

5.5 EFFECTIVE RECORDS MANAGEMENT PRACTICES FOR EFFICIENT PUBLIC SERVICE DELIVERY RECORDS STANDARDS AND SERVICE DELIVERYIN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

Service delivery is a very sensitive term to the community at large. S service delivery refers to the need to ensure that the public service provided to people by government is of quality as per their satisfaction. The concept of service delivery is closely linked to the discipline of political science and public administration at local and central government levels such as health authorities, home affairs, and defense, (Humphreys, 1998; Kemoni, 2008). Marutha (2011) describes service delivery as the service that is given to the community and it should involve their satisfaction. This chapter cuts across records handlers and patients. Batho Pele principles formulated in 2007 give a clear indication that the government sector must keep in mind that everything done is about putting “People first”. The following themes are used to explain and discuss the findings in relation to the objectives:

- Compliance to procedures tools in accordance to service delivery
- Required assistance from the RMU
- Satisfaction towards records management at the hospital
- Frequency of file receipt and follow up visit
- Challenges encountered when in hospital

5.5.1 Compliance to procedures tools in accordance to service delivery

Pember (1998:64) notes that accountability, security, integrity and completeness are key to effective service delivery to the community. The IRMT (1999:1) states that if records are not properly managed, health service may be affected in a negative way. Khoza (2008) noted the issue of negligence by the private hospital, Medi-clinic, regarding the publication of results of the Minister of Health in 2007 by the Sunday Times. Marutha (2011) also revealed challenges regarding the issue of health service delivery to people in Limpopo arising from poor record keeping.

The current survey also confirmed that it was evident that patients at the public hospital spent a lot of time in long queues for files to be retrieved so that they would be attended to. The delays are due to the fact that only two records handlers servicing up to 50 to 60 users. In addition, the file tracking system used at the public hospital was fraught with challenges. In some cases, patients had to bear the cost of buying their own file folders when their files were lost.

The situation was different at the private hospital in that the current records management situation aided service delivery in that the system that they used was very efficient such that it took less than 30 minutes to retrieve a patient's file. However, there were some similarities when it comes to doctors here; both public and private hospitals witnessed some delays though these were not attributed solely to records management function.

5.5.2 Required assistant from the RMU

The Records Management Unit (RMU) is the face of the hospital where the first visit begins and hospital service rating starts. The users were asked how long it took them to get the assistance they were looking for from the RMU.

The findings revealed that for the majority, it took hours; 8% indicated that it took days and only minutes for 6% of the respondents to get assistance from the public hospital. This gives a clear indication that the service at the RMU still needs to be improved. However, it takes a few minutes for most people in the private hospital to get served; while 15% said it took hours. This shows that the public hospital still needs to improve their services to patients. For instance, during the interview, some respondent indicated that sometimes it takes 3 to 4 hours for them to get the required assistance. They further indicated that no improvement was seen since they had been using the hospital. Scholars such as Marutha (2011), Ngoepe (2008), Katuu (2015) and Pyrene (2015) all pointed out that there is need for improvement in service provision in the public hospitals.

5.5.3 Satisfaction towards records management at the hospital

Poor records keeping affects the whole functioning of the organization; this leads to poor service provision (IRMT, 1999). Ngoepe (2008), Marutha (2011) and Pyrene (2015) all reported that poor records management was an issue in public hospitals.

The study found that the majority of patients from the public hospital were not happy with the way their records were being managed by the OPD. The study found that the OPD (Out Patient Department) was responsible for all files in the hospital. These are managed by clerks. The study revealed that the condition of the files was not satisfactory since they were dusty, torn and missing folios. The findings revealed the private hospital did not re-use their files Instead, each time a patient comes to the hospital, and they create a new file, except if it is a follow-up visit then the hospital would request the file from Metro File. Doctor's practice also experiences the problem of torn files and space; however, no patient had mentioned file loss. This confirmed the findings by Marutha (2011), Kerry (2006), Norden et al (2004) and Pyrene (2015).

5.5.4 Frequency of file receipt and follow up visit

The survey revealed that public hospital users' records were normally found at the OPD (others call it front desk etc.). They used carrier cards to collect their files from the OPD. The study revealed that all files were collected from other units by the clerks daily, so when patients came they would retrieve them from the OPD during their follow-up visit. The researcher observed

that a notice was written on the window indicating which cubicle to go to for follow-up visits. Due to long queues, the patients end up opening new files each and every time they came to the hospital to avoid long queues. In the private hospital, on a second visit, the patient only goes for confirmation of personal information and to receive a new folder for consultation. This tells us that the public hospital only creates one file for each of their patients whereas the private hospital creates a new file each and every time a patient comes for consultation at the hospital. Marutha (2011) and Pyrene (2015) found that patients were given small cards with file numbers to be used for second visits in public hospitals.

5.5.5 Challenges encountered when in hospital

Patients encounter various challenges when in government facilities and little has been said about private organizations mistreating their clients or their users. Marutha (2011), Kalusopa (2011) and Pyrene (2015) identified challenges such as infrastructure as a challenge in provision of improved service.

The study revealed that the challenges faced by the public hospital in the (OPD) are: File loss, missing folios, torn files, delayed diagnosis and long lines. The private hospital revealed that they encountered insufficient funds from medical aids, torn files, delay in diagnosis and that in the doctor's room long queues are experienced. Marutha (2011), Kerry (2006) and Norden (2004) all reported similar challenges; this confirmed that this is not new in the hospital but has been around for a decade without being addressed.

5.6 Summary

This chapter discussed and interpreted the data presented from the findings of the study in the previous chapter. The interpretation and discussions followed themes in line with the study's objectives and research questions as per the IRMT and ISO 15489. Related literature from Africa in general as well as specifically from South Africa was used to corroborate some of the findings. The study confirmed that challenges include some of the following: lack of framework, file loss, poor facilities to manage records, lack of skillful people to run RMUs. The findings revealed the lack of monitoring by NARSAA and other related stakeholders. The study looked at the level of compliance to set the regulatory framework in public and private hospitals and the

current records management strategies programs and systems in records management. It further discussed the integration of ICTs in the management of medical records in the private and public hospital. Lastly, it discussed the effective records management practices for effective public service delivery, standards service delivery in public and private hospital.

CHAPTER SIX

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS OF THE STUDY

6.1 INTRODUCTION

The previous chapter presented the data interpretation of the research findings. The aim of this chapter is to present the conclusions drawn from the results of the analysis of the questionnaires, interviews and focus group discussions and then make recommendations for further research. Furthermore the chapter presents the summary, conclusions and recommendations of the study under these topics compliance to set regulatory framework, effective records management, and level of compliance to set regulatory framework and records management practices for efficient public service delivery.

6.2 SUMMARY OF THE FINDINGS OF THE STUDY

This section gives the summary of the study. The summary of the study is in line with the study objectives in chapter one.

6.2.1 LEVEL OF COMPLIANCE TO THE SET REGULATORY FRAMEWORK IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

The first objective of the study was to look at the level of compliance to the set regulatory and policy framework on records management in public hospitals and private hospitals. The study established that:

(a) The level of compliance to records management standards is very poor for both public and private hospitals; this refers to ISO 15483 and policies that guide management of records.

(b) There is a lack of awareness of required records management standards in both the public and private hospital.

(c) Public hospitals have a policy on the management of records that covers the management of both paper and electronic records. However, in essence, the policy only drives the management of paper records and not electronic records. This seems to be different in the private hospital in that there is an attempt to implement the management of both paper and electronic records even though the level of use remains low, slow and is still evolving. Nevertheless, a detailed policy was provided on behalf of the private hospital by the commercial records center that managed records on behalf of the private hospital.

(d) There is a lack of specialized skills in both public and private hospitals in the NARSAA guidelines and the ISO 15489.

(e) The paper-based records still dominate even though the private hospital uses both formats. Medical records from the public hospital were not electronically but manually created while in the private hospital records were electronically created even though they still also use the paper record format.

The study further looked at the policy on types of format used; it was established that there was no specific policy on formats.

6.2.2 CURRENT RECORDS MANAGEMENT STRATEGIES, PROGRAMS AND SYSTEMS IN RECORDS MANAGEMENT IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

This objective was to assess the record management processes, programs and strategies which are in place to aid service delivery and to investigate the types of records being managed in both public and private hospitals. The study established that:

(a) In terms of the records management structure, the public hospital records system is centralized whereas the private hospital's system is decentralized. The doctors in the private hospital used the centralization system in their rooms like in the public hospital.

(b) There was a lack of clarity regarding who was responsible for the management of records in the RMU in the public hospital as witnessed by the lack of records handlers who would oversee the whole functioning of records. On the other hand, the responsible persons in the private hospital were administrators and records officers.

(c) The level of education that mostly dominated those managing the records management function was a certificate and diploma and not in any way related to records management. Records handlers with diplomas were nurses, and doctors with degrees. Furthermore, the analysis that these records handlers' qualifications were not in line with records management. The creation of records begins at the OPD; the carrier card is given after file creation from the public hospital. The private hospital creation of records is done with both formats at the reception and nothing is given to the patient after opening a new file. The new creation is done every time a patient comes to the hospital in the private hospital.

(d) On the format used in both hospitals, the public hospital largely maintained the paper records while the private hospital maintains both paper and electronic records.

(e) The classification scheme used by both the public and private hospital was a numerical system to classify their records.

(f) The records management procedural manual and tools were available in both the public hospital and private hospital. However, each hospital derived their procedure manual and tools from NARSAA (2007) and NHCSA (2003) prospective for public and private hospitals respectively. The study found that the prospective gives proper guidelines on how records should be handled in both public and private hospital.

(g) On file tracking tools and systems, the manual system is used in public hospital through the means of registers. In the private hospital, they use both systems, especially in doctors' room. The private hospital creates new records each time the patient comes to the hospital.

(h) For location and length retrieval, in public hospital, the file retrieval took more than 60 minutes, more time spent than the estimated time. The overall findings were that in the private hospital, the file retrieval process was very effective and was not time-consuming to users.

(i) On the frequency of use of medical records in public and private hospital, the public hospitals use the physical search for the files and used registers for file tracking; while the private hospital uses the electronic system or software called “MEDID, SAP”.

(j) In terms of a quantifier of records, a number of records created in the public hospital were quite voluminous when compared to the private hospital. The private hospital created more than 200 records a day and the issue they had was staffing shortage as they handled the entire work.

(k) In terms of appraisal and retention schedule, the public hospital looked at the value of the records before appraisal took place. When their records were ready for disposition, they use the recycling process. The private hospitals,on the other hand, do not dispose of their records but rather keep them for life in offsite storage.

(l) Both hospitals were faced with challenges of storage issues that led to the private hospital using offsite storage for its records. On the other hand, the public hospital recycled their records after five years and the private hospital kept them for life.

(m) There was no proper disaster planning, management and recovery, in public hospital whereas in private they did have a disaster management plan. Their disaster plan was well established and maintenance is done frequently.

(n) The challenges faced by the management of medical records were space in both hospitals and resource shortage in the public hospital. Lack of security measures in the public hospital and the equipment to be utilized for the management of records was another identified problem. In the public hospital stationary like flip files was a problem as they relied on the contributed fee by patients. File creation was regarded as effective but time-consuming through the use of the manual system. Some of the causes of service delay

include inadequate space and physical search of files as some were placed on chairs. Training was one of the major issues clouding records management in South Africa. Before 1994, the provision of training to newly hired staff was a major thing.

6.2.3 INTEGRATION OF ICTS IN THE MANAGEMENT OF MEDICAL RECORDS IN PRIVATE AND PUBLIC HOSPITALS IN THE UMHLATHUZE AREA

This objective was to investigate the integration of ICTs and its use by the public and private hospitals. The study further looked at the benefits provided by the electronic system. The study established that:

(a) The level of integration when it comes to ICTs in the public hospital was very poor and ineffective. On the other hand, the private hospital had systems in place that were utilized for record management and for file creation in the hospital.

(b) It was established that the public hospital may have some ICTs in place; these were not being used for records management purposes, but for administration. On the other hand, the private hospital was much more equipped with technology which was utilized in the right way such as: file retrieval, data storage and for file classification.

(c) The study sought to establish the purpose of ICTs in records management functions. The study established that the public hospital, as much as they were aware of the purpose of ICT, lacked implementation. The study affirmed that while the public hospital was very slow in adopting ICTs, the private hospital was much more exposed to ICTs.

(d) The study looked at availability and implementation of records management functions, and established that the little that they had of ICTs, the public hospital used it for communication purposes. On the other hand, in the private hospital, there was availability and robust use of ICTs for data storage, communication, classification, and data processing. The public hospital has room for improvement on the implementation of ICTs.

(e) The study also sought to establish training in ICTs for records management; the findings revealed that in the public hospital, the training of ICTs was absent in the public hospital, while in the private hospital, they received training.

6.2.4 EFFECTIVE RECORDS MANAGEMENT PRACTICES FOR EFFICIENT PUBLIC SERVICE DELIVERY RECORDS STANDARDS AND SERVICE DELIVERY IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

The objective above was aimed at finding out about efficient service delivery in relation to Batho Pele principles that was formulated in 2007 by the South African government. The study sought to find out the compliance to procedures and tools in accordance with service delivery. The Batho Pele principle emphasizes a high level of transparency in service delivery, timeliness etc. and the service offered in accordance to NARSA to help improve service delivery. The study established that:

(a) The public hospital needs to improve on the service delivery offered to the people; on the other hand, the private hospital improves service delivery for its patient by delivering service on time.

(b) The study sought to establish required assistance by the RMU. The findings revealed that patients from the public hospital spent more time waiting for service in long queues. The private hospital put the needs of the client first; it provides them with the services required on time.

(c) The study sought to find out the level of satisfaction towards records management at the hospital. The study revealed that in the public hospital they were not satisfied with the service that they get from the hospital: too much time was spent waiting for service. On the other hand, in the private hospital, they were satisfied with the service that they got from the hospital. The study showed that users do not always get all the information and service they are looking for in the public hospital.

(d) The study looked at the frequency of file receipt and follow up visit. The study revealed that in the public hospital they received their files from the OPD and sections are divided into

first timers and second visitors. In the private hospital, there was no restriction as to where to go for the second visit as the creation of a new file was done every time a patient came to the hospital.

(e) Challenges encountered from the public and private hospitals were: Missing files, the length of retrieval was very long, insufficient funds from medical aid, torn file, space, dust and leaks from the roof. In the public hospital, they were understaffed, only two people serviced 50+ people; therefore, that resulted in files missing, files covered with dust as nobody cared about them. The Elis band is used to bind leaflets that are falling off from the file.

6.3 CONCLUSIONS OF THE STUDY FROM THE FINDINGS

The conclusions of the study as per objectives are presents below.

6.3.1 LEVEL OF COMPLIANCE TO THE SET REGULATORY FRAMEWORK IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

With regards to the level of compliance to the set regulatory framework, the study concluded that:

(a) Both public hospital and private hospital have a general policy that governs the hospital's day to day running and is functioning very well.

(b) The public hospital does not comply with the regulatory framework in that:

- The lack of training on the importance of NARSAA and policies involved in records management was another noticeable issue that our governmental bodies face and they need to act on it.
- The policy should be distributed to the rest of the government institutions with a lot of awareness rising on the document for better application.

(c) Both public and private hospitals have a record management policy in place; therefore, the study concluded that even though both hospitals do have a records management, more needs to be done in order for the policy to be put into practice.

(d) In both the public and private hospital, those responsible for records management lacked skills; Very little was known in both the public and private hospital.

(e) Types of formats in the public hospital and private hospital were largely paper-based. The adoption of ICTs was prevalently adopted in private hospitals while in the public hospitals, it was very low.

6.3.2 CURRENT RECORDS MANAGEMENT STRATEGIES, PROGRAMS AND SYSTEMS IN RECORDS MANAGEMENT IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

With regards to the current records management strategies, programs and systems in records management, the study concluded that:

(a) The structural records management in both the public and private hospital used the centralization system whereas the private hospital used the decentralization system.

(b) On responsibility, awareness among records handlers, the public hospital records handlers learned as they went, finding their feet through working with the system because no training was provided for them and they lacked relevant skills. As much as the private hospital were aware of their responsibility, more training was required for records management as it was seen that the use of computers was known more than record management skills.

(c) The level of qualification among records handlers in both public hospital and private hospital is mainly certificate and diploma. The records handlers were trained in ther fields, not records management.

(d) Records creation in the public begins at the OPD. In the private hospital the creation of files begin at the receptionist where a new file is created every time the patient comes to the hospital.

(e) Paper records are predominantly the form used in medical records management in both public hospital and private hospital. The private hospital uses both formats. The public hospital still has to adapt to the ICTs use.

(f) Both the public and private hospital used a numerical system for classifying their medical records.

(g) The procedure manual and tools used in the hospitals-The study revealed that both hospitals had procedure manual in place. The public used NARSAA 2007 and the Department of Health. The private hospital followed NHCSA 2003 and the Head office private hospital guidelines.

(h) The study was effective in determining whether the file tracking system was in place. The study revealed that registers were used in public hospital, where they physically searched for the file. The private hospital uses electronic system whereas the doctors use both systems.

(i) The study purposefully determined the location and the length retrieval in both hospitals. The study revealed that too much time was spent which contributed to poor service delivery. The private hospital was more efficient when doing file retrieval and the creation of files.

(j) The public hospital created or retrieved more than 200 records per day and because of shortage of staffing, they end up delivering poor service. The private hospital, on the other hand, created more than 100 records a day, using the system that they used which made it easy for them to work fast through the use of the electronic system (SAP).

(k) The study achieved its purpose of finding out appraisal and retention schedules of medical records. The study revealed that both hospitals they looked at the value of the records for appraisal and public hospital they used recycling process for the retention schedule in the public hospital. The private hospital did not dispose of their records, they were retained for life.

(l) In terms of records storage, security, and preservation of records:

- In the public hospital, their records are stored at OPD, whereas in the private hospital they used offsite storage.
- For securities, they used burglars at the public hospital, whereas in private hospital they used the Closed Circuit TV, alarm key, password.
- The public hospital kept their records at the Out Patients Department (OPD); after five years they recycled them, they are no longer taken to archives.
- In the private hospital, on the other hand, their policy says their records should be kept for 20 years but their records have never been disposed of for over 25 years now.

(m) The private hospital has disaster management in place; when disaster strikes, their system is linked to the fire department whereas the public hospital did not have a disaster management plan.

(n) The challenges that faced the management of medical records in the public hospital were as follows: torn files, missing files, dust, and leaks from the roof to file duplication. The private hospital was faced with the challenge of space for storage of files.

6.3.3 INTEGRATION OF ICTS IN THE MANAGEMENT OF MEDICAL RECORDS IN PRIVATE AND PUBLIC HOSPITALS

With regards to integration of ICTs in the management of medical records the study established that:

(a) The level of integration of ICTs through records management was seen in the wards where they use computers to retrieve X-rays in the public hospital. In the private hospital, they were fully equipped with ICTs.

(b) The type of ICTs used in the public hospital was monitors, printers, fax, the internet but all these are used for communication purposes. The private hospital utilized computers, fax, CPU, the internet, intranet, scanners to enhance records creation and retrieval.

(c) The public hospital used ICTs for communication purposes while the private hospital used it for file storage, retrieval, and file creation.

(d) The implementation of ICTs in the public hospital remained low whereas the private hospital's implementation of ICTs in relation to records management was only witnessed in the reception area.

(e) No training had been provided for records handlers in the public hospital whereas in the private hospital they provided training through the commercial records center that worked with the private hospital.

6.3.4 EFFECTIVE RECORDS MANAGEMENT PRACTICES FOR EFFICIENT PUBLIC SERVICE DELIVERY

With regards to effective records management practices for efficient public service delivery the study established that:

(a) Patients at the public hospital spent a lot of time in long queues for files to be retrieved so that they would be attended to. Similarities were found when it comes to doctors. Both the public and private hospital witnessed some delays though these were not attributed solely to records management function. As such, both hospitals need to improve their services somehow.

(b) The study findings revealed that too much time was spent waiting for files at the public hospital. At the private hospital, they spent less time at the RMU which made their service to be more effective and not time-consuming.

(c) With regards to patient satisfaction towards records management, the study revealed that the users were not happy about the way their files were handled by the RMU due to these reasons: files go missing, insufficient file storage, too much time spent on long queues waiting for records torn files, lack of electronic system and unconducive infrastructure for storing records. On the other hand, the private hospital did not keep files for long but in the doctors' rooms, similar issues were witnessed.

(d) The study revealed that for the frequency of file receipt and follow-up visits, the public hospital got them from the OPD using carrier cards whereas the private hospital created a new file every time a patient came to the hospital.

(e) The study was able to establish challenges encountered in the hospital. The study revealed that slow retrieval of records and late diagnosis resulted in poor service delivery from both hospitals.

6.4 RECOMMENDATIONS

The following recommendations are made in line of the objectives of the study.

6.4.1 LEVEL OF COMPLIANCE TO THE SET REGULATORY FRAMEWORK IN PUBLIC AND PRIVATE HOSPITALS IN THE UMHLATHUZE AREA

In terms of the level of compliance to the set regulatory framework, the following are the recommendations:

(a) The Department of Health needs to take charge in guiding hospital functioning in the government sector. More detailed or descriptive clarification is required in the policy of hospital management in both public and private hospitals.

Legal and policy framework on records management in public and private hospitals need to be implemented. There is a need for a national policy that is well developed by NARSA for all government stakeholders including non-governmental agencies. NARSA needs to take

charge of the government sector to make sure proper records management is done in all government sectors. More awareness is required by related stakeholders. Very little has been said about the management and integration of e-records as well as the issue of the preservation of digital records in both public and private hospitals.

(b) There is need for records management policy in both public and private hospitals. NARSA must take charge to see if the policy is being followed and used correctly by these institutions. Training or workshops are needed for records handlers to help them understand the responsibilities and roles.

(c) With regards to responsibilities of records management, the study recommends that records management units should be monitored even if that can be done once a year. There is a need to restore the giving of certificates for performance to those that perform very well when monitoring. This will motivate records managers.

(d) A clear policy regarding paper and electronic records should be stipulated. Adoption of ICTs in public hospitals is recommended.

6.4 2 CURRENT RECORDS MANAGEMENT STRATEGIES, PROGRAMMES AND SYSTEMS IN RECORDS MANAGEMENT IN THE CONTEXT OF SERVICE DELIVERY

In terms of the current records management strategies, programs and systems in records management, the study recommends that:

(a) When it comes to the structure of records used, the public hospitals need to adopt the style used by the private hospitals not to manage everything by them but get assistance from other stakeholders. In addition, the hospitals need to employ more people who are knowledgeable about records management.

(b) Qualified people should be employed to take care of records management in both public and private hospitals. The public hospital should be given a chance or opportunity to recommend things to be done in their hospital because they are the ones who deal with

the facilities rather than having other departments take decisions for them. Contribution fees at the public hospital, it must be used to buy more stationery in order to prevent records handlers from asking users to buy folders using their own money when their files are full.

(c) The literature has noted that records handlers do not have appropriate qualifications in Africa in general. This means there is a need to hire qualified people to deal with records. The selection criteria should be taken into consideration to avoid a crisis of file loss, etc. encountered by RMUs.

(d) With regards to the creation of records, public hospitals should employ the electronic aspect of managing records for faster and efficient use. The private hospital should continue utilizing ICTs in other arrears of the hospital especially in the wards.

(e) There is a need to train people to deal with records management; they must know conditions under which paper records should be used. Furthermore, they must be equipped with relevant skills to deal with ICTs.

(f) The classification scheme was efficient to use in both hospitals. Both public and private hospitals use numerical classification; the public hospital can learn one or two things in the way the private hospital implemented their system through commercial records.

(g) The stakeholders need to be involved in making sure that the mandate is fulfilled. The use of ISO 15489 needs to be fully adopted by both public and private hospitals. More awareness is required on NARSA and ISO, including its importance to records management.

(h) Both the public and private hospitals use registers as well as an electronic tracking system. The study commends the use of both aspects in the private hospital and therefore recommends that the public hospital should also adopt the use of technology as one of the tracking systems for service to be delivered efficiently.

(i) In the public hospital, more time is spent waiting for service and in the private hospital, they do exceptionally well; their patients spent less time. More people should be hired to avoid long lines or queues in public hospital.

(j) The public hospital should learn the style used by the private hospital of dealing with a lot of records fast. Adoption of ICTs needs to be considered.

(k) The public hospital uses the manual system to physically search for 300 files every day. Skillful people should be employed and again there is need to convert to technology.

(l) The appraisal system and retention schedule in both public and private hospitals were satisfactory. Nonetheless, clarity on the policies to guide the appraisal and retention schedule is required.

(m) With regards to disposal, retention and destruction of medical records, both hospitals used the system very effectively in a manner that was beneficially recycling old records in public hospital. The private hospital keeps medical records for life.

(n) With regards to records storage, security and preservation, both public and private hospitals should consider increasing storage space. Regarding security, the public hospital still has a lot of work to do in order to ensure that security measures are in place. They can borrow ideas from the private hospital's security measures system. Again, the public hospital needs to deal with their preservation system for it records and NARSAA needs to intervene.

(o) The disaster planning, management and recovery were well implemented in the private hospital. The public hospital needs to put disaster management plan forward.

(p) More space is required for storage in both public and private hospitals. Skillful people are required and the adoption of ICTs is recommended.

6.4.3 INTEGRATION OF ICTS IN THE MANAGEMENT OF MEDICAL RECORDS IN PRIVATE AND PUBLIC HOSPITALS IN THE UMHLATHUZE AREA

With regards to the integration of ICTs in the management of medical records, the study recommends that:

(a) Public hospitals should adopt the electronic records management system to help improve service delivery. In private hospitals, full development of the electronic records management within is required so that ICT is implemented throughout.

(b) On types of ICTs used in the management function, various tools were used in the private hospital in accordance with records management, whereas in the public hospital, they were used for communication purposes. In the public hospital ICT should be utilized in accordance with records management.

(c) ICTs should be used in other areas of the hospital not at the reception only in private hospitals. The public hospital needs to adopt the system used in the private hospital to help improve their service.

(d) With regards to access, availability and implementation of ICTs for records management functions, the public hospital it still very slow in the adoption of ICTs, therefore, adoption is needed. The private hospital utilized ICTs very well by using these for storage purposes, retrieval and classification, whereas in the public hospital, a manual system is used.

(e) In terms of ICTs training, the private hospital offers staff training and the public hospital still lags behind. Therefore, the study recommends that implementation of ICTs and training of personnel in ICT use should be provided. The NARSA needs to go back to providing training and workshops for records handlers.

6.4.4 EFFECTIVE RECORDS MANAGEMENT PRACTICES FOR EFFICIENT PUBLIC SERVICE DELIVERY

With regards to effective records management practices for efficient public service delivery, the study recommends that:

(a) Compliance to procedures tools in accordance with service delivery is recommended. The researcher determined that long hours were spent trying to get service in the public hospital while the private hospital was able to deal with the pressure. The public hospital needs to put Batho Pele principles into practice at all times.

(b) Satisfaction regarding records management at the private hospital was expressed; the public hospital should be more hands with regards to systematic running of the hospital, starting from within the hospital. The CEO should sometimes visit departments before a departmental official can come to evaluate level of performance on how they are servicing the users. There should be a visible suggestion box for patients to make suggestions regarding service delivery improvement. The private hospital management is more hands on with regards to day to day running of the hospital on. They always want to see reports and they make follow-ups on issues raised. The CEOs of the hospitals should visit departments unannounced to see if they meet the hospital mission, vision and motto of providing the best service to the people.

(c) The public hospital uses a different section for follow-up visits whereas the private hospital uses the same section for first timers. File loss and torn files were some of the prevalent concerns of patients, therefore, a tracking system must be installed and qualified people must be employed to avoid mismanagement of records in public hospitals. Records management state-owned facilities need to be well monitored in order for them to function at their best. Therefore, equipment and staff with relevant skills are required. The Batho Pele principles need to be put into action, not just pasted on walls.

6.5 RECOMMENDATION FOR FUTURE STUDY

This comparative study was an eye opener in learning about the similarities and differences between the public and the private hospital. The findings can help bridge the gap between the two hospitals in terms of service delivery. This study also underscored the fact that there is a

need for a medical framework to guide in the management of medical records in South Africa. The study recommends that more comparative studies should be conducted on a broader spectrum in KwaZulu-Natal. The study further suggests that benefits of using commercial records should bring to light so that they play a big role in records management because it has help the private hospital and other NGOs to have effective systems.

6.6 FINAL CONCLUSION

The study has achieved its purpose of investigating the management of medical records in public and private hospitals in Umhlathuze area, South Africa. The study investigated service delivery in accordance with records management. The findings revealed that the services at the public hospital were not satisfactory. The study investigated issues related to the regulatory framework in accordance with the level of compliance to set procedures and policies used in records management. The public hospital was measured in relation to NARSA and the Batho Pele principles whereas the private hospital was measured on Batho Pele principle only since they do not comply with NARSA. The study findings revealed that policies are available that governs records management functions but that there are problems relating to the implementation of these policy frameworks. The study further investigated service delivery in both public and private hospitals. The objective was to get the users of these hospitals to rate the service rendered to them by these hospitals. The findings revealed that users were happy with some of the service they get from the public hospital. The users from the public hospital raised issues they face every day which includes missing files, torn files, too much time spent on queues and proper instructions not conveyed properly. In the private hospital, patients get proper directions from hospital staff. The private hospital, on the other hand, raised concerns about medical aids paying late because that caused tension and may result in patients not getting the help they require from the private hospital. The private hospital is financially driven to make a profit. The integration of ICTs was very poor in the public hospital whereas in the private hospital; they utilized ICTs to provide service to their clients.

In conclusion, the evidence shows that in both public and private hospitals, poor records management could undermine service delivery and therefore transparency and accountability in health delivery. The study recommends a suite or requisite framework that underlines good records management governance; recordkeeping system; records management technology and infrastructure; records archival processes and records management human resource capabilities.

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Appendix 1 Informed Consent Form

Tick to confirm

I confirm that I have read and understand the information sheet dated 16 November 2016 for the above study**.** ☐

I have the opportunity to consider the information, asked questions and have had these answered satisfactorily. ☐

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. ☐

I understand that relevant sections of any of information I provide during the study, may be looked at by responsible individuals from the research team or from regulatory authorities. ☐ ☐

I agree to take part in the above research study.

Name of participant	Date	Signature
Name of Researcher	Date	Signature

Appendix 2 Introductory Letter

Respondent

I am a master's student in the Department of Information Studies at the University of Zululand conducting a study on comparative study of medical records management practices at Private and Ngwelezana hospitals in Umhlathuze Area, Kwa-Zulu Natal Province, South Africa. The study has been cleared by the Department of Information Studies examination committee and the Office of Research and Development from the University of Zululand.

You are therefore kindly asked to make some time for the interview which will enable me to highlight issues in medical record keeping in your hospital or organization and how they may impact on service delivery.

Thank you.

L.P LUTHULI

Appendix 3 APPROVAL LETTER FROM NETCARE

RESEARCH OPERATIONS COMMITTEE FINAL APPROVAL OF RESEARCH

Approval number: UNIV-2016-0056

Ms Lungile Precious Luthuli

E mail: lungile.dapresh.luthuli@gmail.com

Dear Ms Luthuli

RE: MEDICAL RECORDS MANAGEMENT PRACTICES IN PUBLIC AND PRIVATE UMHLATHUZE AREA, SOUTH AFRICA

The above-mentioned research was reviewed by the Research Operations Committee's delegated members and it is with pleasure that we inform you that your application to conduct this research at private Hospital, has been approved, subject to the following:

i) Research may now commence with this FINAL APPROVAL from the Committee.

ii) All information regarding the Company will be treated as legally privileged and confidential.

iii) The Company's name will not be mentioned without written consent from the Committee.

iv) All legal requirements regarding patient / participant's rights and confidentiality will be complied with.

v) The research will be conducted in compliance with the GUIDELINES FOR GOOD PRACTICE IN THE CONDUCT OF CLINICAL TRIALS IN HUMAN PARTICIPANTS IN SOUTH AFRICA (2006)

vi) The Company must be furnished with a STATUS REPORT on the progress of the study at least annually on 30th September irrespective of the date of approval from the Committee as well as a FINAL REPORT with reference to intention to publish and probable journals for publication, on completion of the study.

vii) A copy of the research report will be provided to the Committee once it is finally approved by the relevant primary party or tertiary institution, or once complete or if discontinued for any reason whatsoever prior to the expected completion date.

viii) The Company has the right to implement any recommendations from the research.

ix) The Company reserves the right to withdraw the approval for research at any time during the process, should the research prove to be detrimental to the subjects/ Company or should the researcher not comply with the conditions of approval.

x) APPROVAL IS VALID FOR A PERIOD OF 36 MONTHS FROM DATE OF THIS LETTER OR COMPLETION OR DISCONTINUATION OF THE TRIAL, WHICHEVER IS THE FIRST.

xi) Netcare cannot provide permission on behalf of any Doctor. Permission to be obtained separately and individually for each Doctor.

We wish you success in your research.

Yours faithfully

20/10/16.

Prof Dion du Plessis
Full member: Research Operations Committee & Medical Practitioner evaluating research applications as per Management and Governance Policy

Shannon Nell
Chairperson: Research Operations Committee
Date: 21/11/2016.

This letter has been anonymised to ensure confidentiality in the research report. The original letter is available with author of research

APPENDIX 4 APPROVAL FROM DEPARTMENT OF HEALTH

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

Physical Address: 330 Langalibalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3188/ 3123 Fax: 033 394 3782
Email:
www.kznhealth.gov.za

DIRECTORATE:
Health Research & Knowledge Management

HRKM Ref: 269/16
NHRD Ref: KZ_2016RP49_703

Date: 30 September 2016
Dear Ms LP Luthuli

Approval of research

1. The research proposal titled '**Medical records management practices in public and private uMhlathuze area**' was reviewed by the KwaZulu-Natal Department of Health.

   The proposal is hereby **approved** for research to be undertaken at Ngwelezana Hospital.

2. You are requested to take note of the following:
   a. Make the necessary arrangement with the identified facility before commencing with your research project.
   b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.

3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

Dr E Lutge
Chairperson, Health Research Committee
Date: 30/09/16

Fighting Disease, Fighting Poverty, Giving Hope

APPENDIX 5APPROVAL LETTER FROM NGWELEZANE

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

Ngwelezana Hospital, Thardunse Road Ngwelezana Township
Private Bag X 20021, Empangeni 3880
Tel: 035 901 7000 Fax: 035 794 1883 Email: ceosecretary.ngwelezana@kznhealth.gov.za
www.kznhealth.gov.za

DIRECTORATE:
OFFICE OF THE CEO

Date: 05 September 2016
Enquiries: Dr B.S Madlala

Ms. L.P Luthuli

RE: PERMISSION TO CONDUCT RESEARCH IN NGWELEZANA HOSPITAL

The CEC is pleased to inform you that you are permitted to conduct your research as per your request / application.

Please note the following:

1. This letter does not in any way represent Ethics Approval that should be obtained from a credited Ethics Committee.
2. Should you wish to publish your fincings , kindly ensure that you apply for approval from the provincial Health Research Ethics Committee in KZN Department of health to Dr Lutge(Elizabeth.lutge@kznhealth.gov.za)
3. The Hospital will not provide any resources for this study.
4. You are requested to provide feedback on your findings to the CEO / medical manager's office.

Sincerely

Dr B.S Madlala
Acting Chief Executive Officer
Ngwelezana Hospital

Fighting Disease, Fighting Poverty, Giving Hope

UNIVERSITY OF ZULULAND
RESEARCH ETHICS COMMITTEE
(Reg No: UZREC 171110-030)

RESEARCH & INNOVATION
Website: http://www.unizulu.ac.za
Private Bag X1001
KwaDlangezwa 3886
Tel:- 035 902 6887
Fax: 035 902 6222
Email: MangeleS@unizulu.ac.za

ETHICAL CLEARANCE CERTIFICATE

Certificate Number	**UZREC 171110-030 PGM 2016/270**							
Project Title	**Medical records management practices public and private hospitals in uMhlathuze Area, South Africa**							
Principal Researcher/ Investigator	LP Luthuli							
Supervisor and Co-supervisor	Dr T Kalusopa							
Department	Information Studies							
Nature of Project	Honours/4th Year		Master's	x	Doctoral		Departmental	

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project proposal and the documents listed on page 2 of this Certificate.

Special conditions:

(1) This certificate is valid for 2 years from the date of issue.
(2) Principal researcher must provide an annual report to the UZREC in the prescribed format [due date-31 July 2017]
(3) Principal researcher must submit a report at the end of project in respect of ethical compliance.

The Researcher may therefore commence with the research as from the date of this Certificate, using the reference number indicated above, but may not conduct any data collection using research instruments that are yet to be approved.

Please note that the UZREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the documents that were presented to the UZREC
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

APPENDIX 6 ETHICAL CLEARANCE

Appendix 7 RESEARCH QUESTIONNAIRE

SEMI-STRUCTURED QUESTIONNAIRE FOR ALL RECORDS HANDLERS

(DOCTORS, NURSES, PATIENT ADMINSTRATORS, WARD CLERKS & RECEPTIONIST)

Dear Respondent,

I am a final year post-graduate student at the University of Zululand pursuing a Master of Arts in Information Science. As part of the requirements, I have to undertake a research project to investigate the ***Medical records management practices in private and public hospitals Umhlathuze area, South Africa***. You are, therefore, kindly requested to take some of your valuable time to provide some information by way of answering this questionnaire. The results will be treated with utmost confidentiality and will be used for academic purposes only. I am very much thankful for your cooperation.

Please indicate by putting a cross sig [X] or a tick sign [√] next to the correct answer and explain where possible

Section A: BACKGROUND/BIOGRAPHICAL INFORMATION

1. Type of Hospital
   (a) Public [ ]
   (b) Private [ ]

2. Please indicate your gender
   (a) Male [ ]
   (b) Female [ ]

3. Please indicate your age

   (a) 18 -25 [ ] (b) 25 -35 [ ] (c) 35 – 45 [ ] (d) 45 +yrs. [ ]

4. What is your job title in this hospital?

   (a) Doctor [ ] (b) Nurse [ ] (c) Clerk/Receptionist [ ]

   (d) Other [ ]; Specify:_____

5. What is your highest qualification acquired?

   (a) Matric [ ] (b) Diploma [ ] (c) Degree [ ] (d) Other [ ]

6. Have you received any special training in the maintenance of medical records?

   (a) Yes [ ] (b) No [ ]

7. How long have been working in this hospital?

(a) 0 -5 [ ] (b) 5 – 10 yrs [ ] (c) 10 – 15 yrs [ ] (d) +15yrs [ ]

Section B:LEGISLATIVE AND POLICY FRAMEWORK ON THE MANAGEMENT OF MEDICAL RECORDS

8. Do you have a policy in place that governs your hospital?
   (a) Yes [ ] (b) No [ ]
9. What national legal and policy framework governs management of records at this hospital? ----------
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   ---
10. Does this hospital have a policy on records management?
    (a) Yes [ ] (b) No [ ]

11. Does the policy stipulate clear responsibilities for all internal stakeholders e.g.: records handlers and management?

    (a) Yes [ ] (b) No [ ]

12. Does the policy adequately cover all types of records? E.g. paper, electronic (email, web, graphical)
    (a) Yes [ ] (b) No [ ]

If no please explain further ----------

Section B: DESCRIPTION, CREATION, MAINTAINANCE, USE & DISPOSAL OF RECORDS

13. How is a medical record created or received in this hospital?

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14. What forms of medical records does your unit maintain?

Forms of Records Used	**Responsibilities**					
	Records handlers	**Administration/ management**	**Offsite storage**	**Other**	**Non Response**	**Total**
Paper						
Electronic						
Both						
Total						

15. How many medical records are created or received on a daily basis?

(a) 0 – 5 [ ] (b) 5 – 10 [ ] (c) 10 – 15 [ ] (d) 15 – 20 [ ] (e) 25+ [ ]

16. Do you have a file classification scheme?

(a) Yes [ ] (b) No [ ]

17. How are these medical records arranged and classified?

(a) Alphabetically [ ]
(b) Chronologically [ ]
(c) Numerically [ ]
(d) Any other specify…….

18. Do you have a policy or procedure manual for the creation of new files?

---

19. How effective is the classification scheme in terms of record retrieval?

---

20. How are file requested from the RMU?

---

21. Is the method effective?

---

22. Do you have a file tracking system in place?

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23. If yes, which system does the hospital use?

---

24. If yes is it useful to ensuring that action is taken on time

---

25. What challenges have you faced in managing records regarding their use, creation and description?

---

26. Which type of records management system does the hospital use?

(a) Centralized [ ] (b) Decentralised [ ] (c) Not Sure [ ]

27. If the patient file is not located in its normal place, what do you do?

---

28. Is it proper to create a new patient file when the old one is not found?

(a) YES [ ] (b) NO [ ]

29. If yes, what effect does it have on the continuity healthcare service delivery?

How long does it take to retrieve a patient file?

(a) 5 minutes [ ] (b) 10 minutes [ ] (c) 15 minutes [ ] (d) +15 minutes [ ]

30. Who is responsible for overall management of medical records in this hospital?

(a) Records manger [ ] (b) Records Officer [ ] (c) Administrative [ ] (d) other [ ] specify

---

31. How frequent are the medical records collected from other units?

(a) Hourly [ ] (b) Daily [ ] (c) Weekly [ ] (d) other [ ]

32. Are the admitted patient records kept separate from the out- patient records?
(a) Yes [ ] (b) No [ ]

33. File Tracking Tools

File tracking tools	**Frequency**	
	Total	**Percentages**
(a)Passing Slips		
(b) Physical search for files		
(c)File movement cards		
(d)File census		
(e) Color stickers		
(f) Electronic system card		
(g) Other:_____		
Total		

34. Which of the following criteria do you use to appraise subject files? (Please tick all the applicable options)
(a) value of records such as administrative, legal , financial and
(b) Informational [ ]
(c) Functional analysis [ ]
(d) Sampling procedures [ ]
(e) Other, please
specify.....

35. Which of the following instrument do you use to appraise records?

(a) Retention schedules [ ]
(b) Standing instructions [ ]
(c) Other, please
specify.....

36. Do you have a record retention and disposal programme?

(a) Yes [ ]
(b) No [ ]

37. If yes, which of the following indicates the nature of your records disposition programme? (Please tick all the applicable options)

(a) Transfer to archives [ ]
(b) Physical destruction of records [ ]
(c) Conversion to another medium [ ]
(d) Other, please specify.....

38. Do you destroy records which have been appraised and earmarked for destruction?

(a) Yes [ ]
(b) No [ ]

39. Which of the following methods do you use for the destruction of confidential records? (Please tick all the applicable options)

(a) Shredding [ ]
(b) Chemical destruction (maceration) [ ]
(c) pulping [ ]
(d) burning [ ]
(e) Other, please specify.....

40. Which of the following instruments guide records disposition in your hospital? (Please tick all the applicable options)
(a) Retention schedules [ ]
(b) Administrative procedures [ ]
(c) National Archives and Record Services Act [ ]
(d) Other, please specify.....

Section C: RECORD STORAGE, SECURITY AND DISASTER MANAGEMENT

41. Do you consider the patient registration space and the waiting are as adequate?
(a) Yes [ ] (b) No [ ]

42. Is there anything that is given to the patient after opening a new patient folder?
(a) Yes [ ] (b) No [ ]

43. Which of the following is used to keep the patient folder?
(a) Filling Cabinets [ ] (b) Shelves [ ] (c) Computers [ ]

44. Where are the medical records kept in the hospital?
(a) Registry [ ] (b) Administration Clerks Offices [ ] (c) Computers [ ]
(e) Other [ ] specify please

---

45. Are all medical records kept in one place?
    (a) Yes [ ] (b) No [ ] (c) Not Sure [ ]

46. Is the current space enough for registration and service to patients?
    (a) Yes [ ] (b) No [ ] (c) Not Sure [ ]

47. Does the hospital have separates off sites to store medical records?
    (a) Yes [ ] (b) No [ ]
48. How are medical records secured?
(a) Strong room [ ] (b) Burglar proofed room [ ]
(b) Special room [ ] (e) Other (please specify) [ ]

---

49. Is there any system to keep track of borrowed patient folders within the hospital units regulated? ---

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50. How is the patient health information protected from unauthorised alterations?

---

51. which of the following disasters have you encountered any disasters

    (a) Flooding [ ] (b) Fire out break [ ] (c) Pest attack [ ] (d) all of the above [ ]

    (e) Other please specify----------

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52. Which other disasters are you likely to encounter?

---

53. Does your department have a risk management plan for records?

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54. What strategies have you put in place in order for vital records in case there is a disaster?

---

55. What security measures are in place?

Security measures in place	Frequency	
	Total	Percentages
(a) Passwords		
(b) Usernames		
(c) Antivirus		
(d) Any other _____		
Total		

Section D: ELECTRONIC RECORDS MANAGEMENT

56. What are the challenges in managing and using electronic records?

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57. What do you think can be done to address them?

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58. How is ICT assisting in the delivery of services by the RMU?

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59. How is ICT being utilized to measure customer satisfaction?

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60. What is the contribution of ICT application to records management functions?

ICTs Contribution to Service Delivery	Frequency	
	Total	Percentages
Shortage of software		
inadequate standards and procedure for ICTs adoption		
Inadequate security measures		
Shortage of hardware		
Inadequate financial resources		
Shortage of skilled human resources		
Total		

Functional Area	Communications	Data	Data	Research	Total

		Storage	**Processing**		
Records handlers					
Administration/ management					
Offsite storage					
Other					
No Response					
Total					

ICT Available in hospitals	**Frequency**	
	Total	**Percentages**
Scanners printers		
CPU		
Monitors		
Printers		
Fax		
internet explorer		
Intranet		
Windows server 2003& 2005,10,7		
Exchange server 2003 & 2007		
Microsoft office		
Windows domain		
Total		

Section E: SERVICE STANDARDS AND RECORDS MANAGEMENT

61. Do you think that the current records management situation in your department aids service delivery? ----------

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62. Are you aware of the Customized Service Standards for records management set by South Africa National Archives? ----------

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63. Does the records management Unit meet these standards? ----------
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64. What challenges is the RMU faced with when it comes to complying with the standards? ----------
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65. Which factors are used to measure performance of the RMU staff? ----------
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66. Indicate below how the application ICTs to medical records management has contributed to service?

ICTs Contribution to Service Delivery	**Frequency**	
	Total	**Percentages**
Improved record security		
Improved information preservation		
No response		
Improved communication		
Report generation		
Improved information usage		
Improved Information access		
Improved Information storage		
improved Information retrieval		
Total		

67. What would be the recommended ways to promote effective records management practices for efficient public health service delivery in your hospital? ----------
---

THANK YOU

PATIENT INTERVIEW GUIDE

A. BIOGRAPHICAL INFORMATION

1. How old are you ----------

2. What is your gender----------

3. How often do you come to hospital? ----------

4. Do you see any improvement from when you started using the hospital? ----------

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B. MEDICAL RECORDS AND SERVICE DELIVERY

5. How often do you obtain the information you need to meet your business needs?

   a. All the time [ ]

   b. Sometimes [ ]

   c. Never [ ]

   d. Other specify----------

6. How long does it normally take to get assistance you require from the RMU?

   a. Minutes [ ]

   b. Hours [ ]

   c. Days [ ]

   d. Months [ ]

   e. Longer than the above please specify----------

7. What are the problems that have had an effect on your records access and use?

   a. Missing file(s) [ ]

   b. Torn folders[ ]

c. Missing folio(s)[ ]

d. Other specify:----------

8. What challenges do you encounter when in hospital? ----------

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9. Are you happy with the service provided to you when in hospital? ----------

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10. Do you always get your folder on time? ----------

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11. Do you normally read your medical record or go through the whole record?

Yes [ ] No [ ] Not sure [ ]

12. Have you ever receive the wrong folder that does not belong to you or rectified any mistakes?

Yes [ ] No [ ] Not sure [ ]

13. During the follow up visits where do you get your file?----------

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14. Does it include all your health information and medical care records/notes?----------

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15. Where do you get your medication after examinations and how long does it take?----------

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16. Do the records handlers explain everything to you when creating a file? ----------
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17. Are you happy with the way your records are handled? ----------
---

18. Are you as a citizens given full, accurate information about the health services that you are entitled to receive? ----------
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19. Is the hospital clear in their information provided to you regarding the costs and who is to discharge the health service? ----------
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20. In case of a complaint, is the information available clear about how you will obtain a full explanation and a speedy and effective remedy? ----------
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21. How have they handled your complaints are made on the management of your records and the service in general – have they been sympathetic, positive response? ----------
---
---

22. Does the hospital provide you with the reliable information about their services they provide to you as a patient? ----------
---

23. What is your recommendation towards the hospital on management of the records so that the overall service is improved? ----------
---

Thank for your assistance

INTERVIEW GUIDE S FOR MANAGEMENT STAFF

A. LEGISLATIVE & POLICY FRAMEWORK FOR MANAGEMENT OF MEDICAL RECORDS

1. Are there any laws governing the use of medical records that your hospital adheres to? ----------
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2. Do you have a records management policy for medical records management in this hospital and if so does the policy cover all records management functional requirements? ----------
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3. Do you have a retention or disposition policy for records no longer needed by the hospital? ----------
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4. Is there a records management or information management committee in the hospital?----------
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5. How important is the records and Information Department in the hospital? ----------
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6. Are you aware of the South African National Archives? ----------

7. If yes, what is the role does it play in this hospital regarding records management? ----------
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9. Are you aware that the National Archives keep all in active records of government /private agencies (hospitals) that have continuing value? ----------

10. If you do not transfer your valuable records to the national Archives, what strategies have you put in place to ensure the preservation of records for long term use? ----------
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B. CURRENT MEDICAL RECORDS MANAGEMENT PROGRAMME & STRATEGIES

8. Are you aware of the national and international standards that governs the records management in the world and if so how do you apply in the management of records at this hospital? ----------
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11. Do you have purpose built storage for the management of medical records? ----------
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12. What training has the hospital provided for staff in the Records and information Unit? ----------
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What support do you receive from the Department of Health and the South African national Archives in terms of records management? ----------
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16. What problems have you encountered in the management of hospital records? ----------
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C. INTEGRATION OF ICTS IN THE MANAGEMENT OF MEDICAL RECORDS

14. What is your current and long term plans to computerise the Records and Information unit and introduce a modern electronic patient records system at the hospital? ----------
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If the system already exists, who is responsible for its implementation (IT and records management unit together or IT only) and is such a system functional (in terms of technology, adherence to records functional requirements and staff and user competencies) or how can it be improved upon? ----------
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If the system does not exist, is your hospital read to implement a modern electronic records management system (in terms of infrastructure, staffing and organizational support)? ----------
---

D. MEDICAL RECORDS AND SERVICE DELIVERY

17. How would explain the impact (positive or negative) of the overall records management service on service delivery at this hospital? Is it is effective and efficient enough to service the users (both staff and patients) at this hospital? Any improvement?----------
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18. What improvements would you recommend or you want to see happen at these hospitals in management of medical records? ----------
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19. What are your future plans regarding the improvement of the records management programme in the context of the overall service delivery at this hospital? ----------
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