Records management practice to support patients' treatments in selected public clinics of Mankweng in Limpopo Province, South Africa

Linkie M Ramaphoko
Library Department, University of Limpopo, South Africa
Morongoa.Ramaphoko@ul.ac.za
https://orcid.org/0000-0001-5178-0500

Lefose Makgahlela
Programme of Information Studies, University of Limpopo, South Africa
Lefose.Makgahlela@ul.ac.za
https://orcid.org/0000-0003-1433-2527

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Abstract

This study assessed records management practices to support patients' treatments in the selected public clinics of Mankweng, Limpopo Province, South Africa. In primary healthcare facilities, patient records management begins during the creation stage, when a patient arrives and a file is created before treatment can be offered. Depending on the records' value, the opened file should be managed for as long as the patient receives treatment, longer. Failure to access or retrieve the file may have a negative impact on the continuity of the patient's treatment and progress because there will be no baseline comparison for healthcare practitioners to work on. A quantitative descriptive research design was used to collect data, and a structured questionnaire was administered to 41 participants from eight of Mankweng's 21 public clinics, including registry clerks, administrative clerks, data capturers, and healthcare workers. The collected data were analysed using descriptive statistical data analysis. According to the findings, records were created both manually and electronically and were filed daily before the end of business. Furthermore, public clinics separated active and inactive records to improve retrieval efficiency, and a functional file plan was implemented to ensure that records personnel did not have difficulty in retrieving files. The study recommends that a hybrid system be used to capture records as well as manage and control them throughout their life cycle. This will serve as a backup to prevent service disruptions if the system becomes dysfunctional, such as during blackouts or when a physical file is misplaced. The paper provides valuable information about the state of records management practices in clinics in Limpopo Province.

Keywords: Health care facilities, medical records, public clinics; records management; records management practices

1. Introduction

In South Africa, local community members are advised to first visit public clinics for any medical care, and only if the clinic cannot assist, they will be given a referral letter to visit public hospitals for further diagnosis and treatment. Public clinics serve as the first contact point between patients and medical practitioners. A public clinic is defined as a community-oriented healthcare centre operated by a local government to promote health by providing medical relief to the poor and preventing and controlling diseases in the local community (Kim,

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Cho, Kim, Jo, Eun & Lee 2018: 2). The practice can be seen in the KwaZulu-Natal Department of Health [Bulletin] (2014), where primary healthcare clinics are used for first-contact care in the provision healthcare services as close as possible to where people live and work (Rao & Pilot, 2014). The records produced in healthcare facilities are in line with the Constitution of South Africa's (No. 108 of 1996) mandate, which requires all government departments to create, manage, and control records.

Dwoya (2014: 8) advises that in proper records management practices, records must be kept safely, remain unaltered, reliable, accurate, and usable over time for as long as they are needed to fully support the functions of the organisation they serve. In this way, records can be successfully managed when an organisation follows the records management best practice determined by the International Records Management Trust (IRMT) (1999). According to Yunus and Ariffin (2013: 3), records management practices are those of capturing and recording the organisation's information for future use; the information could then serve as a central point of reference and part of organisational memory. The records are created in consultation with and guided by the National Archives and Records Service of South Africa Act (NARSSA) (No. 43 of 1996).

2. Problem statement

According to Kautzky and Tollmam (2008: 4), in 1994, the South African government introduced the people-oriented primary healthcare service, including mobile clinics, to local communities to relieve the burden carried by the public healthcare centres (PHCs) package. From the researcher's observation during the visitations, patients visiting mobile clinics in the Mankweng area bring along their notebooks so that healthcare practitioners can create personal health files for them. Some patients do not bring their health files that were previously created, and every time they visit the clinic, a new file is opened. Failure by patients to produce a previously created personal health file may negatively affect the continuity of the patient's treatment and progress because there will be no baseline comparison for the healthcare practitioners to work from. The current study only focused on assessing the records management practices to support patients' treatments, and no patients were invited to participate on the study.

In the absence of proper records management practices, where there is no control over the records' creation and management, unnecessary wasteful resources (especially continuation forms), failure to monitor the progress of the patient and repeatedly administering the same medication to a patient are problems that arise. Such challenges can be avoided if healthcare institutions adopt and implement the best records management practices. It was not clear to the researcher how the clinics in Limpopo create and manage their records. For this reason, this study sought to assess the records management practices to support patients' treatments in selected public clinics in Limpopo.

3. Purpose of the study

The purpose of the study was to establish records management practices in support of patients' treatments in selected public clinics of Mankweng in Limpopo.

3.1. Objectives

Objectives of the study were to:

- assess the record management practices in support of patients' treatments in selected public clinics
- identify the challenges in managing the healthcare records in selected public clinics.

4. Literature review

Golfo (2015: 62) asserts that the records management practices of institutions are the most popular topic studied because of its broad scope, which covers the processes involved in the records life cycle, such as creation, receipt, capture, use and maintenance, access and security, retention, protection, and disposition. The US National Archives and Records Administration (2019) comments that records management practices can be assessed by looking at topics, issues, or activities affecting the processes, procedures, policies, training, activities, and transactions taking place during records management.

This study looked at the record management activities and transactions that took place in the public clinics of Mankweng. These tasks are performed by the personnel from diverse backgrounds, some of who are well educated, and some are not. Records management responsibilities require education, knowledge, skills, and experience because managing records daily necessitates decision-making abilities primarily by those who possess one or more of the competencies. Inadequate training of records personnel leads to poor records management because staff do not know what is expected of them and are sometimes unable to understand and interpret the legislation governing records management. For example, a study conducted by Danso (2015: 71) discovered that records management staff at various Ghanaian health facilities received no formal training, skills, or capacity building to manage the records. Similarly, Marutha and Ngoepe (2017: 4) also found that staff members in public hospitals in Limpopo never received training on the policies, procedures, norms, and standards for managing the records, and therefore became uninterested in their work and just work to earn a salary. These findings outline the importance of ensuring that records personnel are provided with continuous training on how to manage and care for the records.

4.1. Record management practices during record life cycle stages

This section presents records management practice literature during various stages of the records life cycle.

4.1.1 Records creation and receipt

The creation of records is the foundation of the entire records management process; therefore, the records personnel in the public clinics must understand the importance of the records as they create and maintain them to be accurate representations of the transactions, activities, or facts and can be relied upon in subsequent activities (Justice, 2016: 112). Matlala and Maphoto (2020: 84) argue that managing the records from their creation leads to records' efficient use, maintenance, and disposition. The records created in public clinics must be managed throughout their life cycle to assist in maintaining the efficiency and effectiveness of the service delivered to patients admitted in those facilities. Marutha (2021: 78) found that management of medical records in Limpopo hospitals was not effective in all the stages of patients' records management, from creation to disposal. Records were not managed properly in the records

creation stage because systems were unavailable to detect and monitor when records were created. Thus, records management officials became aware of the existence of newly created medical records only when the record were received at registry for filing. Public clinics in Limpopo had no system to trace the movement of the file from points A to B. However, the patients leave a file in the consultation room after examination, which makes it easier for the records officers to collect and return to shelves at the end of the day. Sometimes in public clinics, nurses create records, especially at night, over weekends, and during holidays because records management personnel only work normal working hours, from Monday to Friday.

4.1.2 Records maintenance, use, and distribution

According to Mosweunyane (2013: 30), the maintenance, use, and distribution stages imply that the records are actively used and shared in organisations' day-to-day operations to support decision-making and the documentation of further actions. The maintenance phase includes filing, transfers, and retrievals. In accordance with this, these records' movement should be controlled to ensure they are always retrievable and to keep an audit trail of records transactions. At this stage, the individuals who have access to the record must be clearly indicated so there is no delay when the record is needed. The University Hospital Southampton (2018) submits that when records are maintained, the environment in which the records are located; the level of security of the location where records are stored; the ease of access to records; whether the records can be easily located and retrieved; and the layout, which involves the availability of space to store the records, should be considered. Maintenance and distribution of records in the healthcare fraternity seemed to be not well monitored and controlled, hence, Marutha (2021: 78) states that some patients in hospitals in Limpopo kept their files with them and brought them along during visits for healthcare consultations, which compromises the security and confidentiality of these records. Marutha's (2021: 78) findings correlate with the researcher's observation that some patients in mobile clinics in Limpopo brought their own notebooks when they visited mobile clinics and left with them after consultations. Even so, records in public clinics were properly maintained and distributed because they were filed daily at the end of business.

4.1.3 Records disposal

According to IRMT (1999), before the records are disposed of, they must be appraised to separate records with enduring value from ephemeral records. The records are appraised to identify records that can be retained for a longer period so that the organisation can continue with its work and to confirm which records should be destroyed or kept for permanent preservation due to their enduring value or for purposes other than those for which records were created, such as historical research. IRMT (1999) reckons that each institution should have a mechanism for reviewing its records for disposal so they are not retained for longer than necessary. In addition, the University Hospital Southampton (2018) declares that the length of time a record must be kept depends on the type of record, the legal and regulatory requirements, and the assessed importance of that record. The period of retention normally starts from the date of closing the patient's record. The record must be destroyed immediately upon expiry of the retention. The records in public clinics were only transferred to the records 1centre after their active use. The records were not properly disposed of even though, according to the National Guideline for Filing, Archiving and Disposal of Patient Records in Primary Health Care Facilities (2017: 13), the national archivist did not need to approve every application for the destruction of records. General disposal authority numbers (PAK4 for local government and AK2 for provincial health departments) are allocated for records disposal. Once the records

are disposed of, the original destruction certificates must be submitted to the relevant provincial archivist and a copy must be kept and filed by the facility. Therefore, public clinics did not comply with the required mandate.

4.2 Challenges in managing the healthcare records

According to Yaya, Asunmo, Abolarinwa and Onyenekwe (2015: 6), records management problems mostly arise when records are generated in bulk daily. However, the challenges depend on the institution under investigation and the level of development of the institution. The first possible challenge in managing records was inadequately trained or qualified personnel. According to IRMT (1999), the continuous records management process in any phase of the records life cycle depends on the professional capacity and status of staff responsible for the records' use, creation, and maintenance. The institution may have all the resources and infrastructure necessary to manage records, but if the employees who work with records daily are not properly trained, all organisational efforts to manage records will be in vain. Mathabeni-Bokwe (2015: 67) states that the biggest challenge for public hospitals in South Africa was the loss or misplacement of patient files, which causes records management personnel to open temporary files, compromising the quality of health services since the health professionals can only identify the healthcare history of a patient with a temporary file, which could compromise the patient's proper treatment. Garba and Harande (2016: 29) note that medical records need proper management in storage areas, controlled access, and adequate preservation measures to improve efficiency, safety, and quality of care. Luthuli (2017: 117) states that private hospitals in Umhlathuze lacked storage space; thus, hospital records were stored for only one month due to space constraints.

5. Research methodology

The study used a quantitative descriptive design to assess the records management practices in Mankweng public clinics and was undertaken in eight public clinics in Mankweng. Mankweng has 21 public clinics that fall under Mankweng hospital. These clinics are divided into three groups and each group has seven public clinics. Concerning the decision on which clinics to visit, the researcher only selected clinics that were not far from each other and were within the researcher's close coordination to save time for data collection and travel expenses.

Stratified sampling techniques were used to select the participants for the study. This sampling method was used to construct a sample that enabled the researcher to collect enough data to understand the records management practices in public clinics in Mankweng. The researcher sampled only those participants who were on duty at the time of data collection and who were willing to answer the research questions.

The data were collected from 41 participants who were either permanently or temporarily employed as data capturers, registry clerks, administrative clerks, or nurses and others such as healthcare workers, using a structured questionnaire.

Microsoft Word Version 2013 was used to organise and analyse the collected data. Descriptive statisticical data analysis was used to describe the data and examine the relationships between the variables investigated.The researcher summarised the quantitative information, transformed it into percentages, and presented it using figures, tables, charts and descriptions of the number of people involved during the research and study findings.

6. Results and discussion of the findings

Fifty-two questionnaires were distributed to records management personnel, including registry clerks, administrative clerks, data capturers, and nurses, with 41 returned. The overall response rate was 79%, which was deemed adequate (Babbie & Mouton, 2001: 81).

6.1 Demographics

The section examines variables that may have an impact on the records management practices in public clinics, either positively or negatively. The variables examined included the respondents' gender, age, level of education, job titles, and years of work experience.

Table 1: Demographic factors and variables (N=41)

Variables	Responses	Number	%
Gender	Male	17	41
	Female	24	59
Age	18 – 22	0	0
	23 – 27	12	29
	28 – 32	13	32
	33 – 37	9	22
	38+	7	17
Education	Matric	21	51
	National diploma	11	27
	Bachelor's degree	9	22
	Master's degree	0	0
	Other	0	0
Job title	Registry clerk	7	17
	Administrative clerk	13	32
	Data capturer	12	29
	Nurse	5	12
	Others	4	10
Years of experience	Less than a year	5	12
	1 to 5	17	41
	6 to 10	15	37
	11 to15	4	10
	16 to 20	0	0
	21 and above	0	0

According to Table 1, 17 males and 24 females completed the questionnaires. The findings showed that both genders were represented in the clinics, with female participants outnumbering male participants. The study's findings were not influenced by gender disparities or imbalances. Similar findings were found by Mathabeni-Bokwe (2015: 59), which revealed there were more female participants than males.

The table shows that 12 respondents were between the ages of 23 and 27, 13 between 28 and 32, nine between 33 and 37, and seven were aged 38 and older. The findings revealed that young people were employed as record personnel in public clinics.

Based on their educational background, 21 respondents had matric, 11 had national diplomas, nine had bachelor's degrees, and none had master's degrees. Msibi (2015: 57) discovered that most respondents received their highest level of education at a technikon, but none had qualifications related to records management. According to Adjei and Mensah (2015: 149), education level is important for career advancement and development. Education benefits an individual's understanding and comprehension, with the potential for improved work performance.

Table 1 shows that 7 respondents worked as registry clerks, 13 as administrative clerks, 12 as data capturers, 5 as nurses, and 4 as others, including healthcare workers. Surprisingly, the findings showed that job titles for employees in records management differed even though they performed similar tasks. In public clinics in Mankweng, records creation activities are sometimes performed by nurses as they receive patients, especially at night, weekends, and during holidays, as records personnel do not work during those times.

According to Table 1, five respondents had less than a year’s work experience, 17 had 1 to 5 years, 15 had 6 to 10 years, and 4 had 11 to 15 years. Fewer than five years’ experience may be impacted by employee movement to better positions for personal growth and career advancement. According to Abuki (2014: 67), experience is important because it allows individuals to perform their duties effectively and improves their level of comprehension and decision-making abilities.

6.2 Assessment of records management during records management stages.

After establishing respondents' demographic variables, the next inquiry was to assess the records management practices that support patients’ treatments in the researched public clinics.

6.2.1 Records creation

The first important question was to ask how records in public clinics are created to determine the various ways in which records in public clinics are produced and how regular they are filed during their active use.

The creation of records in the healthcare sector is mandated by the South African Constitution, which requires all government departments to create records. According to Marutha and Ngoepe (2017: 6), records should be kept because the information contained in them is needed by medical practitioners to track progress with previous diagnoses and how to proceed with patient treatment.

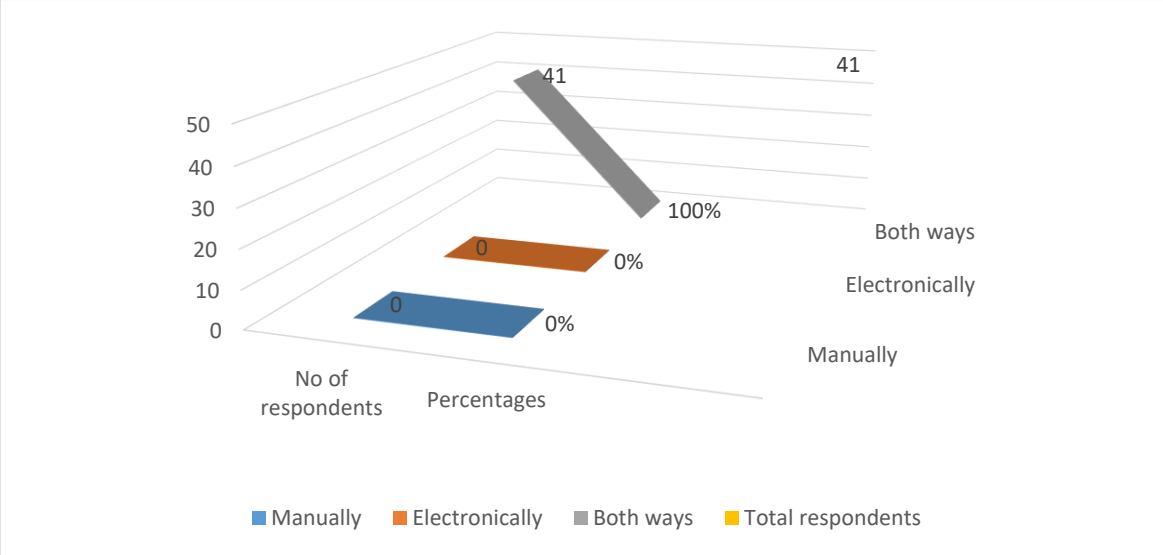

Figure 1: Records creation

According to the findings in Figure 1, all 41 (100%) respondents agreed that records are created both manually and electronically. As a result, the manual and electronic systems used to create records in the healthcare sector include the Health Patient Records Systems (HPRS). It is used to plan the provision of healthcare facilities and services as well as to support tracking of health service usage, and the TIER.Net system, which is used to capture patient-level information at facility level and integrate it with the District Health Information System for reporting various prognoses (Myburgh, Peters, Hurter Grobbelaar & Hoddinott, 2020: 6). Marutha (2019: 559) notes that while public hospitals in Limpopo had hybrid systems, the business electronic system was only used for capturing patients' details and billing patients. Other patient records containing information about prescriptions, treatments, and diagnoses, were created in paper format. Similar systems were used in the public clinics in the Mankweng area of Limpopo. Public clinics in Limpopo used two electronic records patient management systems to create records –HPRS and TIER.Net, but the two systems were only used to capture and record the files, they were not used to track the movement of the files from one service point to another.

6.2.2 Frequency in filing of records

According to Teviu, Aikins, Abdulai, Sackey, Boni, Afari and Wurapa (2012: 136), proper records filing ensures easy retrieval and continuity of care and contributes to reduced waiting time. Figure 2 depicts the frequency with which records are filed in Mankweng public clinics.

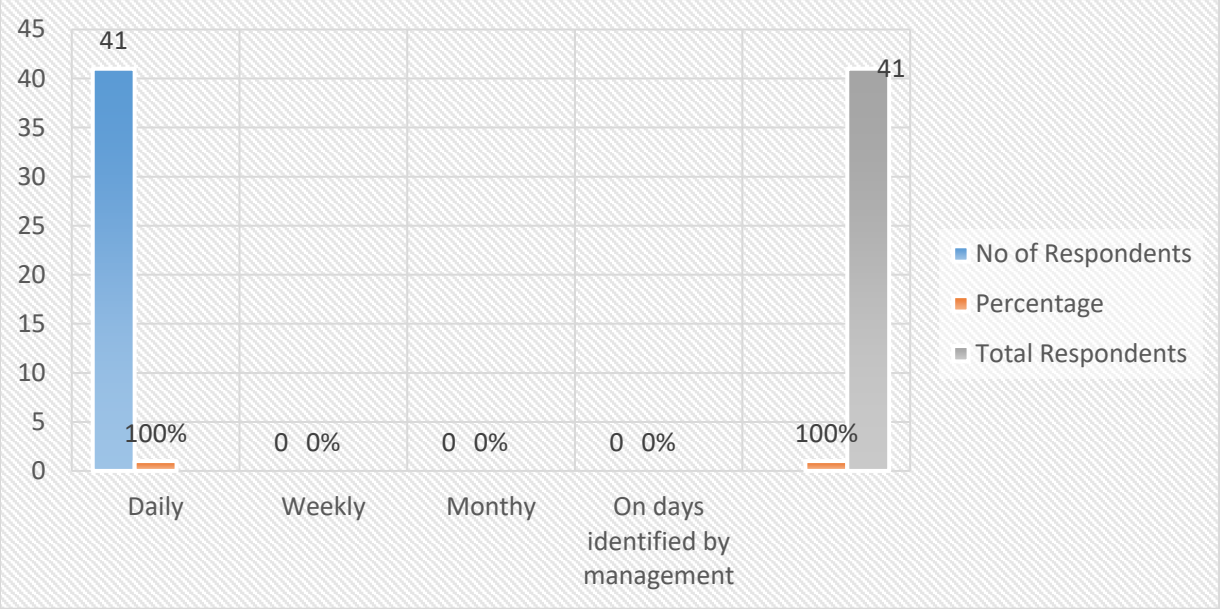

Figure 2: Frequency in records filing

The results in figure 2 showed that all 41 (100%) respondents agreed that patient files are filed every day. Mathabeni-Bokwe (2015: 72) established that at Victoria Hospital, records were collected daily from various units by administration clerks and nurses, and filed and stored in one central location. This is consistent with the National Guideline for Filing, Archiving, and Disposal of Patient Records in Primary Health Care Facilities (2017: 9), which states that administrative employees working at reception must file records into the filing system after the designated person has consolidated all records used for the day. According to Makgahlela (2021: 217), filing the records immediately after use reduces the possibility of missing records. Daily filing helps to prevent misfiling and record loss and allows for quick follow-up on files that were not returned.

This section presents data about records management assessment during various records management stages.

6.2.3 Records management assessment during records creation and receipt

Table 2 presents data about records management practices during records creation and receipt. Respondents were given statements and asked to rate the assessment of records management practices during records creation and receipt. Different options were presented, and respondents were asked to rate the given statement on a 5-Likert scale. In the table below, the findings are presented.

Table 2: Assessment of records management practices during records creation and receipt

RECORDS MANAGEMENT PRACTICES DURING RECORDS CREATION AND RECEIPT	No. of respondents										Total	
	Sa		A		N		D		Sd			
	N	%	N	%	N	%	N	%	N	%	N	%
The clinic offers ongoing training to staff to provide them with adequate knowledge and skills on how to create, capture, and manage the records.	4	10	13	32	4	10	19	46	1	2	41	100
The clinic creates complete and accurate records to provide evidence of the institution's functions, activities, decisions, transactions, and procedures.	11	27	13	32	4	10	8	19	5	12	41	100
The clinic has standardised procedures for sorting, filing, indexing, classification, retrieval, and follow-up action on records to facilitate timely access to and retrieval of records.	16	39	20	49	3	7	2	5	0	0	41	100
The clinic has an accurate inventory of records that covers information such as file title, file reference number, date opened, date closed, and storage location.	29	71	11	27	1	2	0	0	0	0	41	100

The first statement wanted to determine whether the clinic provides ongoing training to staff members to provide them with adequate knowledge and skills in creating, capturing, and managing records. Four (10%) respondents strongly agreed, 13 (32%) agreed, 4 (10%) were neutral, 19 (46%) disagreed, and one (2%) strongly disagreed. Therefore, an average of 19 (46%) disagreed with the given statement.

On whether the clinic keeps complete and accurate records to provide evidence of the institution's functions, activities, decisions, transactions, and procedures, 11 (27%) respondents strongly agreed with the statement, 8 (19%) agreed, 4 (10%) were neutral, 13 (32%), disagreed, and 5 (12%) strongly disagreed.

Another statement assessed whether the clinic had standardised procedures for record sorting, filing, indexing, classification, retrieval, and follow-up action to allow for timely access to and retrieval of records. The results demonstrated that 16 (39%) respondents strongly agreed with the statement, 20 (49%) agreed, 3 (7%) were neutral, 2 (5%) disagreed, and 0 strongly disagreed. As a result, half of the respondents (20: 49%) agreed the clinic had standardised procedures for sorting, filing, indexing, classification, retrieval, and follow-up action on records to facilitate timely access to and retrieval of records.

The following statement enquired if the clinic had an accurate inventory of records, including information such as file title, file reference number, date opened, date closed, and storage location. The findings showed that 29 (71%) strongly agreed, 11 (27%) agreed, one (2%) was neutral, and 0% disagreed or strongly disagreed. According to the results, 29 (71%) strongly agreed with the statement.

6.2.4 Records management assessment during maintenance, use and distribution

Table 3 presents data about assessment of records management practices during records maintenance, use, and distribution. The findings are presented under each statement.

Table 3: Assessment of records management practices during maintenance, use, and distribution

RECORDS MANAGEMENT PRACTICES DURING MAINTENANCE, USE, AND DISTRIBUTION	No. of respondents										Total	
	Sa		A		N		D		Sd			
	N	%	N	%	N	%	N	%	N	%	N	%
The clinic has a functional file plan (classification scheme) that is easily understood so that records can be accessed by any employee without difficulty.	27	66	12	29	2	5	0	0	0	0	41	100
The clinic makes use of technology, such as a bar-coding file management system, to track the physical movement of records.	0	0	2	5	17	41	11	27	11	27	41	100
All the clinic's records are properly stored in record storage equipment without having them stacked on the floor or on top of cabinets and racks.	5	12	6	15	4	10	23	56	3	7	41	100
The clinic separated active and inactive records to enhance retrieval efficiency.	31	76	7	17	3	7	0	0	0	0	41	100

The statement assessed whether the clinic had a functional file plan (classification scheme) that is easily understood so that records can be accessed by any employee. The findings showed that 27 (66%) respondents strongly agreed with the given statement, 12 (29%) agreed, two (5%) were neutral, and 0 (0%) disagreed and strongly disagreed.

On rating whether the clinic made use of technology such as a bar-coding file management system to track the physical movement of records, none of the respondents (0%) strongly agreed with the statement, 2 (5%) agreed, 17 (41%) were neutral, 11 (27%) and 11 (27%) strongly disagreed.

Lastly, respondents were requested to rate whether all the clinic's records were properly stored in records storage equipment without being stacked on the floor or on top of cabinets and racks.

The results depicted that 5 (12%) respondents strongly agreed, 6 (15%) agreed, 4 (10%) were neutral, 23 (56%) disagreed, and 3 (7%) strongly disagreed. Therefore, 23 (56%) respondents strongly disagreed with the statement.

Respondents were requested to scale whether the clinic separated active and inactive records to enhance retrieval efficiency. The results showed 31 (76%) respondents strongly agreed, 7 (17%) agreed, 3 (7%) were neutral, and 0 disagreed and strongly disagreed with the statements. The findings revealed most respondents (31: 76%) strongly agreed that the clinics separated active and inactive records to enhance retrieval efficiency.

The next statement wanted to rate whether the clinic had an accurate inventory of records, which covered information such as file title, file reference number, date opened, date closed, and storage location. The findings demonstrated that 29 (71%) strongly agreed, 11 (27%) agreed, 1 (2%) was neutral, and 0% disagreed and strongly disagreed. Therefore, cumulatively, 29 respondents (71%) strongly agreed.

6.2.4 Records management assessment during records disposal

Respondents were further requested to assess records management during records disposal and rate the extent to which they agreed or disagreed. Table 4 presents the findings for each statement.

Table 4: Assessment of records management practices during records disposal

During records disposal	**No. of respondents**										**Total**	
	Sa		A		N		D		Sd			
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
There are guidelines prescribing uniform record disposal procedures and consistent record disposal action.	1	2	4	10	13	32	13	32	10	24	41	100
The clinic conducts regular reviews to dispose of time-expired records systematically and consistently according to approved records retention and disposal schedules.	2	5	15	37	13	32	10	24	1	2	41	100
The disposal process is properly supervised in advance by sufficiently senior staff in the clinic to minimise the risk of unintentional and unauthorised destruction of records during the disposal process.	3	7	11	27	4	10	5	12	20	49	41	100

Table 4 presents the results of the respondents' responses on the assessment of records management practices during the records disposal stage. The results are elaborated on below.

The first statement wanted to assess if guidelines prescribed uniform records disposal procedures and consistent records disposal action. The findings revealed 1 (2%) respondent strongly agreed, 4 (10%) agreed, 13 (32%) were neutral, 13 (32%) disagreed, and 10 (24%) strongly disagreed.

Respondents were requested to scale if the clinic conducted regular reviews to dispose of time-expired records systematically and consistently according to approved records retention and disposal schedules. Two (5%) respondents strongly agreed, 15 (37%) agreed, 13 (32%) were neutral, 10 (24%) disagreed, and 1 (2%) strongly disagreed.

Finally, respondents were asked to rate how well the disposal process was pre-supervised by senior clinic staff to reduce the risk of unintentional and unauthorised destruction of records during the disposal process. The findings showed that 3 (7%) respondents strongly agreed, 11 (27%) agreed, 4 (10%) were neutral, 5 (12%) disagreed, and 18 (44%) strongly disagreed.

6.3 Security mechanisms for the protection of records

According to the Medical Protection Society of South Africa (2012), record security is critical because records document the institutions' operations and relationships and are vulnerable to threats, particularly storage access control. Records security measures must always ensure the confidentiality, integrity, and availability of patient data. It must also ensure that adequate processes are in place to test the effectiveness of the measures and, if necessary, implement necessary improvements. Figure 3 depicts the security measures implemented to ensure record protection.

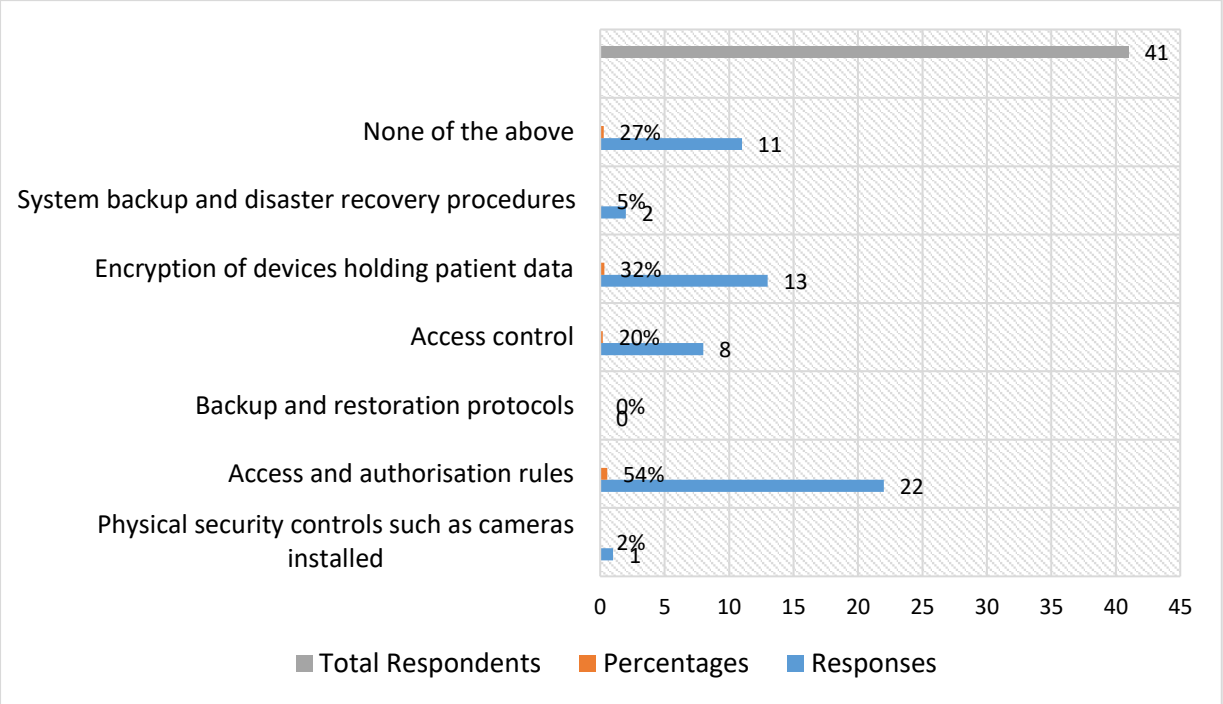

Figure 3: Security mechanism for protection of records

The results showed that one respondent stated that physical security controls such as cameras were installed as a precaution, while 22 stated that access and authorisation rules were used as security mechanism, eight stated that access to records was controlled, two stated that devices holding patient data were encrypted, and another two stated that system backup and disaster recovery procedures were used. Eleven respondents indicated none of these were implemented to ensure record protection. Although certain skills are required to ensure the records' safety, it is safer to keep records in an electronic system than physical format. If physical records are

kept, they should always be kept securely in filing cabinets, drawers, cupboards, or a locked area.

Physical records, such as paper files, are easily damaged, which may necessitate regular monitoring. Instructions and procedures establishing monitoring measures for activities affecting record quality should be established. To prevent unauthorised access to patient records, Ngidi (2015: 79) discovered that access to records is restricted by passwords, locked cabinets, and taking an oath not to disclose confidential information. However, due to lack of appropriate security, access to records in wards was not as secure wards, and no clear measures were taken to keep the files away from unauthorised persons. According to Luthuli (2017: 101), private hospitals in Umhlathuze used burglar guards, security cameras, passwords, and burglar-proof rooms to allow access to records. Private hospitals have a backup system for electronic records, which requires passwords and identification security checks. Offsite storage is used to back up their records. The findings showed that records security is critical because records document the institutions' operations and relationships and are vulnerable to threats, particularly storage access control. Access and authorisation rules have the potential to protect records; however, they cannot be used as a security measure to protect records on their own.

6.4 Monitoring measures to prevent unauthorised access to records

Respondents were asked to identify the monitoring procedures in place to prevent unauthorised access to the records. The researcher sought determine if measures existed to ensure that records were only accessed by authorised personnel. The results are shown in Figure 4.

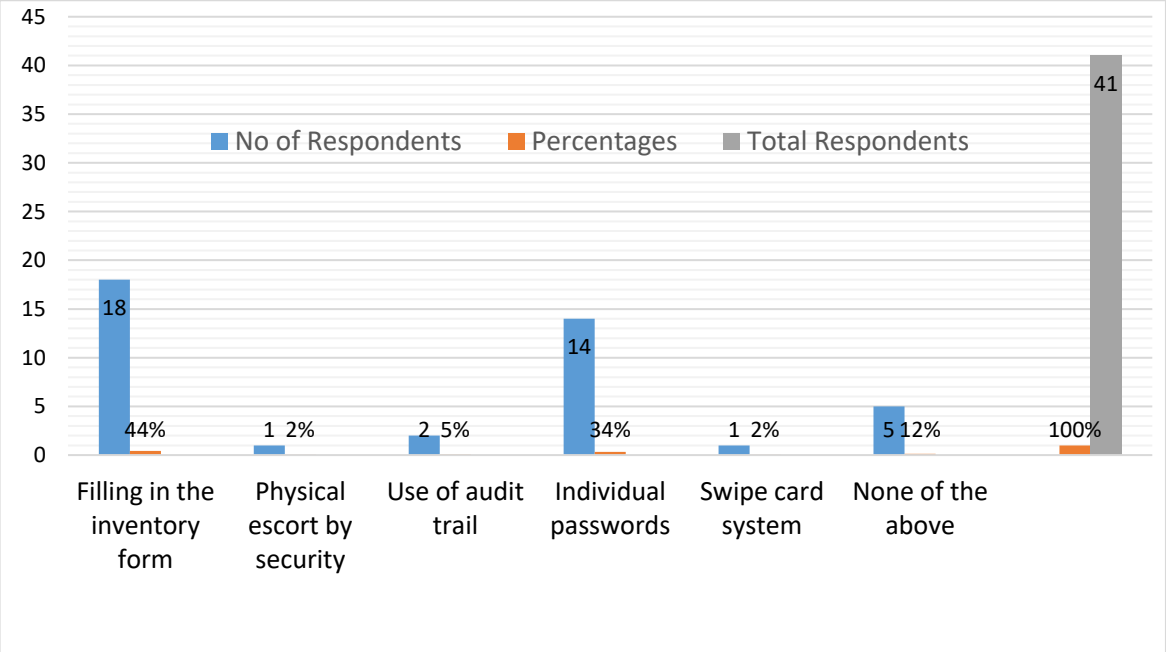

Figure 4: Monitoring measures for unauthorised access to records

Figure 4 indicates that 18 (44%) respondents said filling in the inventory form was used as measure to prevent unauthorised access, 1 (2%) said physical escort by security to records, 2 (5%) said audit trails were used, 14 (34%) said individual passwords, 1 (2%) said swipe card system and 5 (12%) said none of these measures were used. Therefore, a total of 18 (44%)

respondents said anyone who wanted to access the record must fill out the inventory form before access was granted.

According to the Protection of Personal Information (POPI) Act (No. 4 of 2013), all personal information must be protected from loss, damage, unauthorised destruction, and unlawful access by the institution holding the information. Either the patient or someone authorised to act on their behalf can request access to the record. Personal information needs advanced systems and controls to protect the owner of the information from harm.

In this study, the researcher sought find out if public clinics had measures in place to prevent unauthorised access to records. The results revealed that anyone who wanted to access the record had to complete the inventory form before access is granted. This was corroborated by operations managers, who revealed that filing rooms were always locked and nobody was allowed entry besides those assigned to enter. Public clinics had access control signs (No Entry) visible on the doors, patients were not allowed to enter the file room, and the pre- and post-retrieval of records was the responsibility of the data capturers and administrative clerks only. If they were not present, the operations manager or sister in charge performed the duties. Similar findings were noted in the study by Mathabeni-Bokwe (2015: 87), who reported that regulations restricting unauthorised access to medical records existed at Victoria Hospital. The doors to the records room were always closed, and the storage area for patient files was located near the registry.

Patients and other unauthorised persons were prohibited from entering that space. Similarly, the study findings conducted by Makgahlela (2021: 224) established that access to records storage area in municipalities in Limpopo was restricted to registry staff and selected staff, such as messengers. Based on this study's findings, public clinics in Mankweng complied with the principles of authorisation and access control for records. The National Health Act (No. 61 of 2003) and the Medical Protection Society of South Africa (2012) require that medical records be kept in a secure location where unauthorised people cannot access them. However, Adjei and Mensah (2015: 158) state that lack of access policies can result in unauthorised access and leakage or disclosure of confidential information. Policy development leads to some form of monitoring and access control for the records.

7. Conclusion

This study established that records management practices in the public clinics in Limpopo were satisfactory but there were room for improvement. While the findings highlighted that public clinics did not encounter many problems when managing the records, there were many other problems like lack of financial assistance, missing files, misplaced files, and lack of human resource capacity. This finding was contrary to the researcher's observation relating to mobile clinics that there was no proper system to create and manage the patients' records.

Generally, all the investigated clinics used similar electronic systems to register and capture patient records; it is not clear whether the systems could perform other tasks such as maintenance, monitoring, and control of patient files. The study investigated the records management practices in public clinics in Limpopo and recommended that the problems of missing files, duplications, misplaced files, and delayed service delivery would be solved by the full adoption of an electronic filing system with the paper format as a backup. A collaborative hybrid system will help improve healthcare service delivery in public clinics.

Declaration

Authors declare that:

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- Manuscript and study meet all the ethical requirements of the journal and that of our institution or company, as well as legal requirements of the study country.
- There is no any potential conflict of interest for the research.
- All authors are familiar with the content of this manuscript and gave consent to co-publish.
- All authors contributed to the writing of the article manuscript.
- Authors take responsibility to keep participants information confidential as required by legislations including Protection of Personal Information Act.
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