

MEDICAL RECORDS MANAGEMENT SYSTEM IN THE MANAGEMENT OF TUBERCULOSIS PATIENTS IN ST. FRANCIS NSAMBYA HOSPITAL: A CROSS-SECTIONAL STUDY.

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ABSTRACT

Background

The study aimed to assess the Medical Records Management System (MRMS) in the Management of Tuberculosis Patients at St. Francis Nsambya Hospital.

Methodology

A cross-sectional design was used to assess the current state of the MRMS, including its structure, utilization, and functionality at a single point in time. The study targets the staff in the TB clinic who use the existing medical records management systems to manage TB patients. Participants were sampled using a non-probability method, specifically purposive sampling. The study encompassed qualitative data collection from home care section, where the TB clinic is found, including a target study population, face-to-face interviews, document review guide, and observation guides.

Result

The study had a total of 12 participants but only 9 responded. The majority of which were record program administrators (75%) & had 2-2.9 years of experience in using the medical records. Pertaining to the status of TB records many (83.3%) said that TB records were in an active state, while the rest reported they were in both active and semi-active states. All respondents (100%) confirmed the use of a centralized system. Identified challenges in filing and storage of TB records were: Misfiling and misplacement of records (100%), Delayed retrieval of records (100%), Overcrowding of files on shelves (66.7%), Lack of sufficient staff with expertise in records filing and storage (50%) and inadequate storage equipment (50%).

Conclusion

The back-to-front filing method used in the hospital, ensured the strategic placement of new documents on top of preceding ones, simplifying document retrieval. The findings highlighted the hospital's commitment to systematic filing practices, furthermore the hospital's dedication to maintaining accessible records for current healthcare activities. Moreover, the need for targeted interventions to enhance records management practices.

Recommendations

Methods towards filing and storage need to be improved, challenges addressed, and enhancement in record management

Keywords: *Medical records management, Tuberculosis, System, St Francis Nsambya hospital*

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INTRODUCTION.

Tuberculosis (TB) is a communicable disease that is one of the top 10 causes of death worldwide; and the leading cause of death from a single infectious agent. Drug-resistant tuberculosis (DR-TB) includes both multidrug-resistant (MDR) and extensively drug-resistant (XDR) TB. Multidrug-resistant TB. Tuberculosis is a global public health concern that has persisted for centuries. The World Health Organization (WHO, 2023) lists tuberculosis (TB) as the primary infectious agent-related cause of death and one of the top 10 causes of death globally. In 2020, there were an estimated 9.9 million

new TB cases globally, and 1.5 million people lost their lives due to TB-related causes.

MDR-TB does not respond to at least isoniazid and rifampicin; the 2 most powerful anti-TB drugs while extensively drug-resistant TB (XDR-TB), is a form of multidrug-resistant TB where the mycobacterium tuberculosis germ develops additional resistance to more anti-TB drugs; thus responding to even fewer available medicines. MDR TB has been reported in 117 countries. TB disproportionately affects low and middle-income countries, with over 95% of TB deaths occurring in these regions. It is a major contributor to the global burden of disease, particularly in Sub-Saharan Africa

Globally, Tuberculosis (TB) is one of the top 10 leading causes of death from a single infectious agent, causing 1.2 million deaths among HIV-negative individuals and 208,000 among HIV positive individuals in 2019.

TB in Africa and Sub-Saharan Africa bears a significant share of the global TB burden. In this region, TB is exacerbated by factors such as high population density, limited healthcare resources, and the concurrent burden of other diseases, such as HIV/AIDS. In 2020, Africa accounted for approximately 25% of global TB cases.

In 2018, 10 million TB cases were reported, 1.5 million died and 484,000 had drug-resistant TB. In 2019, there were 3.3% of all TB cases worldwide or 465 instances of Multi-Drug Resistant/Rifampicin Resistant TB (MDR/RR-TB) per 1000 people worldwide. MDR/RR-TB affects around 470,000 people globally each year, and 180,000 people worldwide die from this form of TB, according to estimates from the World Health Organization (WHO). The prevalence of multidrug-resistant TB in sub-Saharan Africa has been steadily declining by 0.1% per year, according to a systematic review and meta-analysis of 915 articles published between 2007 and 2017. The prevalence was found to be 2.1% overall.

Uganda, located in East Africa, is among the countries in Sub-Saharan Africa grappling with a high TB burden. The country faces unique challenges, including high population growth, limited healthcare infrastructure in rural areas, and a significant prevalence of HIV coinfection, which further complicates TB management.

In Uganda, TB is the primary killer of HIV-positive individuals with co-infection rates of 50–60%, with an expected 88,000 cases of TB in 2019. It reported 15,600 fatal TB cases and 88,000 new cases in 2019. 1.6% of all TB cases in Uganda are MDR/RR-TB. MDR-TB patients have been documented to die from a variety of causes, including HIV co-infection, nonadherence, aging, and lack of education. The median survival of these individuals has also been found to be 375 days, with characteristics such as alcohol use, concomitant conditions, and poor adherence being connected with it.

St. Francis Nsambya hospital is a renowned healthcare institution dedicated to providing comprehensive care and treatment, particularly in the context of infectious diseases, including tuberculosis (TB). St. Francis Nsambya hospital has made substantial strides in adopting technology, with the implementation of an EMR system designed to streamline the documentation and retrieval of patient information.

However, despite this technological advancement, St. Francis Nsambya Hospital continues to rely on traditional paper records alongside the EMR systems. The coexistence of these two record-keeping methods originates from a shared source of patient data, which has given rise to several challenges in the management of Tuberculosis (TB) records.

The issues stemming from this coexistence include discrepancies in data entry, duplication of efforts, inefficiencies in record retrieval, data security concerns, and potential compromises to patient confidentiality. These challenges not only impede the hospital's ability to provide efficient and timely care to TB patients but also raise questions about the overall integrity and reliability of the medical records management system.

The study aims to assess the Medical Records Management System (MRMS) in the Management of Tuberculosis Patients at St. Francis Nsambya Hospital.

Specific Objectives.

1. To identify the existing medical records management system in the Management of TB patients.
2. To identify the challenges associated with medical records in the Management of TB patients.
3. To identify solutions to improve the current medical records management system used in the Management of TB patients.

METHODOLOGY.

Study design/Research design.

A cross-sectional design has been used to assess the current state of the MRMS, including its structure, utilization, and functionality at a single point in time. It has identified and quantified challenges faced by healthcare staff in using the MRMS for TB patient management.

It enabled the adoption and effectiveness of proposed solutions or interventions to enhance the MRMS. It helps measure the quality and accessibility of TB patient data within the MRMS at a specific moment. Moreover, it helps capture a snapshot of patient engagement in managing their medical records through surveys or interviews with TB patients.

Study area:

The study was conducted at St. Francis Nsambya hospital. It is a renowned healthcare institution dedicated to providing comprehensive care and treatment, particularly in the context of infectious diseases, including tuberculosis (TB). St. Francis Nsambya Hospital has made substantial strides in adopting technology, with the implementation of an EMR system designed to streamline the documentation and retrieval of patient information by the MOH as well.

Study population:

The study targets the staff in the TB clinic who use the existing medical records management systems to manage TB patients at St. Francis Nsambya Hospital. The staff included the following: medical records staff, TB clinic staff (eg technicians) and pharmacy section.

Sampling design

A non-probability sampling method was used to select technical staff who directly use the existing medical records management system to manage TB patients at St. Francis Nsambya Hospital to participate in the study.

Purposive sampling, also known as purposeful or judgmental sampling, is a non-probability sampling technique where participants are selected intentionally based on specific criteria that are relevant to the research objectives (Palinkas et al., 2015). In the context of the study on the impact of the Medical Records Management System (MRMS) on TB patient management at St. Francis Nsambya hospital purposive sampling is a valuable approach due to the need to gather insights from key stakeholders who possess expertise and unique perspectives. All the technical staff in the TB clinic were eligible to participate in the study. Specifically, the technical staff working in the TB clinic, records department and pharmacy were identified and selected from the list of employees obtained from the human resources department/hospital administrator.

Sample size calculation

The sample size includes all the technical staff in the TB clinic, medical records and pharmacy section. 12 technical staff in the TB clinic were interviewed.

Methods of Data collection

This study employs three primary data collection methods: interviews, document review, and observation.

Each method served a distinct purpose and contributed to a comprehensive understanding of the research topic. The selection of these methods was driven by the need to explore the strength and weakness of the Medical Records Management System (MRMS) used in the management of TB patient at St. Francis Nsambya Hospital.

Interviews Method.

The method allowed in-depth exploration of participants' experiences, perspectives, and emotions related to the research topic. The interviews were structured with a predetermined set of questions and semi-structured with open-ended questions to allow for flexibility. The choice of interview format depended on the research objectives and the level of depth and detail require.

An interview guide was used to collect data from the technical staff who regularly use the existing medical records management system to manage TB patients at St. Francis Nsambya hospital. The interview guide was used to capture data on; (i) how the participants use existing medical records management system to manage TB patients. (ii) Challenges faced in using the existing medical records management system to manage TB patients, and (iii) suggestions to improve the existing medical records management system in the management TB patients.

1. Document Review Method.

This method helped utilize historical data and objective information that might not be obtainable through other means. Documents can serve as valuable sources of evidence and context for the research.

This was undertaken to gain an understanding of the Hospital operations of the TB clinic and the guidelines for using existing medical records management system (MRMS) to manage TB patients at St. Francis Nsambya Hospital. For example, the MRMS manual, data policy, different registers used at the TB clinic and ICT policy, among other key documents were to be reviewed. The reviewed documents were provided by the records department at St. Francis Nsambya Hospital.

2. Observation Method.

Observation provided direct data on behaviors, interactions, and the context in which they occur. For instance, choosing between participant or non-participant observation and deciding whether the observation was overt (participants are aware of being observed) or covert (participants are unaware). Moreover, the process of writing TB patient records on hardcopies and the current status of paper-based filing system on shelves in the records department were observed and documented.

Data management and analysis

Data management encompassed all aspects of data handling from the collection, storage, quality assurance and flow, to processing, compilation and analysis. Data was analyzed by qualitative analysis techniques, for example, thematic, content and discourse analysis were also used.

1. Interpretation and presentation of results

Synthesis of information and development of recommendation rely on the three (3) main principles, that is, (i) Intuitiveness; (ii) What does theory or literature tell; and (iii) What do the results show/imply on ground. Results from all statistical analyses were presented and discussed in the main research report. Results have been presented in the form of legible text, summary tables, and pictorials.

2. Quality assurance and quality control

The quality of the data was ensured in the following ways;

- i. The proposal was submitted to Supervisor(s) allocated by the MIHS to review and approve the study as part of the standard procedure of the MIHS to ensure quality.
- ii. Only technical staff members in the TB clinic of St. Francis Nsambya Hospital were eligible to participate in the study and interviewed after filtering them from the staff lists obtained from the Head of TB clinic,

iii. Data security, the data was backed up on a remote Google doc for ease of retrieval even in the event of data loss due to a software or hardware problem

iv. Provide regular update to the supervisor(s) on the progress of data collection, data analysis and report writing and seek for her guidance at each stage of the study.

v. The Grammar and spell check function in MS-Word 2013 was used to search for grammatical errors and spelling mistakes so as to inform the process of making corrections when writing the draft and final research report.

Ethical considerations

i. Consent was sought from the management of St. Francis Nsambya hospital to access the electronic TB medical records and the paper-based records.

ii. A consent form was designed and used to seek the respondent's consent to participate in the study and sign on the form prior to the interview.

iii. Voluntary participation. No handouts have been given respondents as a way to entice them to respond. This is entirely academic research and not for financial benefits. The purpose of the study and objectives was explained to the respondents before they consented to respond to the questionnaire and provide access to the system and documents.

iv. Only technical staff members who work at St. Francis Nsambya hospital were eligible to participate in the study by responding to the questionnaires.

v. Confidentiality of the information. The data and findings were dealt with absolute confidentiality. For example, access rights to the raw data were granted to the research only. The findings were reported in general terms in the report without mentioning names of clients whose case files were reviewed during the study.

Table 1; This table presents the current position and response rate of technical staff interviewed in TB clinic.

Unit/Position	Expected Number of Respondents	Actual number of staff that responded.	Response Rate (%)
Records Program Administrators	4	3	75.0
Pharmacy	3	2	66.7
Records Managers	2	2	100
TB Clinic Staff	3	2	66.7
Overall	12	9	75

(Source: Primary Field Data, 2023)

RESULTS.

Background information of the respondents

Current position and response rate of technical staff in TB clinic

A total of 12 respondents were selected for the research at Nsambya Hospital, representing different roles within the healthcare system. However, not all of the selected respondents participated in the study. Table 1 shows the expected number of respondents and the actual turnout per unit. The response rate varied among different respondent categories, with some having a higher participation rate than others. For example, records program administrators had a 75% turnout, while pharmacy and records managers had a 66.7% turnout. Overall, a total of 9 out of 12 targeted responses participated in the study, hence a response rate of 81.8%.

Working experience in using the Medical Records Management System

The technical staff members mainly had experience of 1-1.9 years (33.3%) and 4 plus years in using the current MRMW used in the management of TB patients at the Homecare unit of St. Francis Hospital, Nsambya (Figure 1). The few years of experience indicated that there is need for knowledge and skills transfer from the experienced staff to those with less years of experience in using the MRMS.

Current status of filing and storage of TB records at St. Francis Nsambya Hospital

The current state of filing and storage practices of medical records at Nsambya Hospital, including the methods used, the status of records, and the equipment used for storage.

Current Filing Methods

The systematic filing of paper records into files is a commonly employed method at Nsambya Hospital. The back-to-front filing method was identified as the primary approach used by records custodians. This method involves placing new documents on top of preceding documents in a file to keep the most recently created document accessible. Respondents noted that this method simplifies the filing process, as it doesn't require the removal of records from the file to add new ones.

Status of TB records

When respondents were asked about the status of records, majority (83.3%) said that TB records were in an active state, while 27.7% reported that records were in both active and semi-active states. This implies that records are regularly accessed and utilized in ongoing healthcare activities.

Storage equipment

Filing cabinets were identified as the primary storage facility used for organizing and storing medical records of TB patients at the Homecare unit in Nsambya Hospital. Although filing cabins seem secure, the volume of records increases over time and will necessitated full automation of the document management system to minimize time taken to file and retrieval TB records.

Management of Records at the TB clinic of Nsambya Hospital

Records filing and storage were managed centrally, with 100% of the respondents confirming the use of a centralized system. The records, including patient records and administrative files, were organized systematically on shelves, ensuring uniformity and consistency in filing, shelving, and retrieval practices.

Challenges faced in filing and storage at the TB clinic of Nsambya Hospital

Several challenges were identified in the filing and storage of TB records at Nsambya Hospital: Table 2 shows that most respondents experience some form of challenge,

for example, Misfiling and misplacement of records (100%), Delayed retrieval of records (100%), Overcrowding of files on shelves (66.7%), Lack of sufficient staff with expertise in records filing and storage (50%) and Inadequate storage equipment (50%). This implies that these challenges reinforce each other and need immediate workable solutions.

Table 2; this table presents the challenges faced in filing and storage at the TB clinic

Challenges	Respondents (n=9)
Lack of sufficient staff with expertise in records filing and storage	50%
Misfiling and misplacement of records	100%
Overcrowding of files on shelves	66.7%
Inadequate storage equipment e.g Cabins	50%
Lack of sufficient space and rooms for record files	33.3%
Poor quality files i.e. Easily get damaged/torn	16.6%
Delayed retrieval of records	100%

Suggestions for Filing and Storage at Nsambya Hospital

Respondents provided several suggestions for improving filing and storage practices, including:

- i. Establishing an effective records management system.
- ii. Streamlining the filing system for easier access.
- iii. Regularly reviewing the classification system.
- iv. Encouraging the use of electronic records systems.
- v. Providing staff training on records management.
- vi. Employing professionally trained records management staff.
- vii. Automation systems to be introduced.

Systems Used at the TB Clinic

The TB Clinic at Nsambya Hospital uses separate national, standardized, paper-based registers for recording and reporting TB-related data. Additionally, the National TB and Leprosy Programme in Uganda utilizes the District Health Information System (DHIS2), a web-based, open-source health management information system (HMIS). DHIS2 is used to collect, analyze, and report on a wide range of health data, including TB and leprosy data. The system also includes features specifically designed to support TB and leprosy patient management.

The electronic case-based surveillance system (eCBSS) is being used in Nsambya Hospital to improve the management of TB and leprosy patients. The eCBSS is a web-based system that allows healthcare workers to track patient adherence to treatment, manage patient referrals,

generate reports on TB and leprosy treatment outcomes, and identify and monitor TB and leprosy contacts.

The eCBSS is integrated with the District Health Information System (DHIS2), which is the main health management information system used in Uganda. This integration allows healthcare workers to easily access and share patient data between the two systems.

The eCBSS is being used in Nsambya Hospital to improve the following aspects of TB and leprosy care:

- **Patient adherence to treatment:** The eCBSS allows healthcare workers to track patient adherence to treatment by sending text messages and reminders to patients. The eCBSS also allows healthcare workers to identify patients who are at risk of defaulting on treatment and to provide them with additional support.
- **Patient referrals:** The eCBSS allows healthcare workers to easily refer patients to other health facilities for specialized care or for further investigations. The eCBSS also allows healthcare workers to track the progress of referrals and to ensure that patients are receiving the care they need.
- **TB and leprosy treatment outcomes:** The eCBSS allows healthcare workers to generate reports on TB and leprosy treatment outcomes. These reports can be used to identify areas where TB and leprosy control programs are not working as well as they should and to make necessary adjustments.

- **TB and leprosy contact tracing:** The eCBSS allows healthcare workers to identify and monitor TB and leprosy contacts. This helps to prevent the spread of TB and leprosy to other people.

Page | 7 The eCBSS is a valuable tool for healthcare workers in Nsambya Hospital. It is helping them to improve the quality of care that they provide to TB and leprosy patients.

Here are some specific examples of how the eCBSS is being used in Nsambya Hospital:

- A TB patient is prescribed a course of 6 months of treatment. The eCBSS is used to send the patient text messages and reminders to take their medication on time. The eCBSS also allows the healthcare worker to monitor the patient's progress and to identify any potential problems with adherence to treatment.
- A patient with leprosy is referred to a specialized leprosy center for further investigations. The eCBSS is used to generate a referral form and to send it to the specialized center. The eCBSS also allows the healthcare worker to track the progress of the referral and to ensure that the patient is receiving the care they need.
- A healthcare worker generates a report on TB treatment outcomes for the previous month. The report shows that 90% of TB patients were cured at the end of treatment. The healthcare worker uses this information to identify areas where the TB control program is working well and to make necessary adjustments.
- A healthcare worker identifies a contact of a TB patient. The eCBSS is used to send the contact a text message inviting them to come to the hospital for TB testing. The eCBSS also allows the healthcare worker to track the contact's progress and to ensure that they are receiving the care they need.

The eCBSS is a powerful tool that is helping to improve the management of TB and leprosy patients in Nsambya Hospital. It is helping to ensure that patients receive the care they need and that TB and leprosy are prevented from spreading to other people

Medical records being used at the TB clinic

The HMIS FORM 089 TB LAB REGISTER is a form used by health facilities in Uganda to record the results of TB laboratory tests. The form is used to track the following information about TB patients; Name, Age, Sex, Address, Date of test, Type of test, Result of test and Treatment status

The HMIS FORM 089 TB LAB REGISTER is an important tool for monitoring the TB epidemic in Uganda and for evaluating the effectiveness of TB control programs. The data collected on the form is used to generate reports on the following; Number of TB cases diagnosed, Types of TB most commonly diagnosed, Treatment outcomes for TB patients.

The HMIS FORM 089 TB LAB REGISTER is also used to identify patients who need further investigations or treatment. For example, if a patient has a positive TB test result, they will be referred to a doctor for further evaluation and treatment.

Here is an example of how the HMIS FORM 089 TB LAB REGISTER is used:

A patient comes to a health facility with symptoms of TB, such as a cough that lasts for more than two weeks, fever, night sweats, and weight loss. The healthcare worker at the health facility collects a sputum sample from the patient and sends it to the laboratory for testing.

The laboratory technician tests the sputum sample for TB bacteria. If the test result is positive, the laboratory technician will record the patient's information on the HMIS FORM 089 TB LAB REGISTER. The laboratory technician sends the patient's information to the district TB control office.

The district TB control office uses the information on the HMIS FORM 089 TB LAB REGISTER to monitor the TB epidemic in the district and to evaluate the effectiveness of the TB control program. The district TB control office also uses the information to identify patients who need further investigations or treatment.

Other Tools Used in Medical Records Management at St. Francis Nsambya Hospital

Electronic Medical Records (EMR) management at Nsambya Hospital includes the use of Snap Patient software, which is a web-based EHR software suite designed for health clinics. Snap Patient software offers

secure, web-based access, medical records management, immunization tracking, and robust reporting and analytics features.

Additionally, manual management tools such as stock records, bin cards, receipt books, purging, out guides, and indexing are utilized in the hospital's record-keeping practices.

DISCUSSION.

The study revealed several key findings regarding the filing and storage of records at Nsambya Hospital; alphabetical and chronological filing methods. Cabinet filing is the most widely used approach for storing legal records. Various storage equipment, including filing cabinets, boxes, open fixed shelves, computers, cardboards, and drawers, are used to create, receive, and store records and challenges identified include poor file folders, limited storage space, a lack of a comprehensive filing scheme, and insufficient training for records managers

Several studies have explored the challenges and best practices in medical records management within healthcare institutions. Notably, the findings resonate with previous research that has highlighted the significance of systematic filing methods, such as the back-to-front approach, in ensuring the ease of document retrieval (Qureshi, 2012). Furthermore, the challenges identified, including misfiling, overcrowding of files, and inadequate staff expertise, are consistent with broader trends observed in healthcare settings.

However, it's worth noting that the specific challenges faced by Nsambya Hospital, such as overcrowding of files and the need for electronic record systems, may require tailored solutions that align with the hospital's unique context and resources. While these findings align with broader research on medical records management, they also emphasize the importance of context-specific strategies.

This study has shed light on the current state of records management practices at Nsambya Hospital, identifying key challenges and potential solutions. The findings highlight the hospital's commitment to systematic filing methods, with the back-to-front filing approach being the primary approach used. However, the study also reveals several challenges, including misfiling, overcrowding of files, inadequate staffing, and delayed retrieval (Qureshi, 2012)

The challenges identified in this study can have a significant impact on the quality of healthcare services

provided. Misfiling can lead to delays in retrieving patient records, which can impact the timeliness and accuracy of diagnosis and treatment. Overcrowding of files can make it difficult for staff to locate records efficiently, which can also lead to delays in care.

CONCLUSION.

Based on the specific objectives of this study, the following conclusions can be drawn:

Identify the Existing Filing and Storage Methods.

The findings reveal that the back-to-front filing method is the primary approach used at Nsambya Hospital. This method ensures the strategic placement of new documents on top of preceding ones, simplifying document retrieval. This conclusion highlights the hospital's commitment to systematic filing practices.

Assess the Status of Records.

The research demonstrates that records at Nsambya Hospital are in active use, with the majority of respondents indicating that records are in an active state. This finding underscores the hospital's dedication to maintaining accessible records for current healthcare activities.

Identify Challenges in Filing and Storage.

The study identifies several challenges in records management, including misfiling, overcrowding of files, inadequate staffing, and delayed retrieval. These challenges underscore the need for targeted interventions to enhance records management practices.

RECOMMENDATIONS.

The recommendations proposed in this study are aimed at addressing the identified challenges and enhancing records management practices at Nsambya Hospital. Implementing these recommendations can help improve the efficiency and effectiveness of healthcare service delivery, ultimately leading to better patient outcomes.

Building upon the conclusions drawn from the study's specific objectives, the following recommendations are proposed:

Improve Existing Filing and Storage Methods

To further enhance the existing systematic filing method, the hospital should consider periodic training sessions for records custodians. These sessions can reinforce best practices in filing and storage, ensuring the continued effectiveness of the back-to-front filing approach.

Enhance Record Status Management

While records are predominantly in an active state, it is essential to maintain this status. Regular audits and assessments of record usage can help identify records that can transition to semi-active or archival status, freeing up space and resources for active records.

Address Challenges in Records Management

To address the challenges identified, Nsambya Hospital should consider the following measures:

1. **Professional Staff:** The hospital should hire qualified records management staff to mitigate unprofessional conduct. Additionally, existing staff should undergo training in information and records management.
2. **Training Seminars:** Regular records management seminars and consultations with records consultants should be organized to enhance staff skills and knowledge.
3. **Storage Equipment:** Procurement of additional filing cabinets and other storage equipment, such as acid-free boxes, should be considered to improve storage conditions.
4. **Ventilation:** Implement proper ventilation measures, such as using curtains to prevent dust entry, and establish closed fixed shelves to protect records.
5. **Record Tracking System:** Design an electronic record tracking system to monitor the movement of records within the organization, reducing misplacement.
6. **Staff Welfare:** Increase the welfare of records staff through salary adjustments, allowances, and additional benefits to motivate performance.

7. **Automation:** Consider automating the records management system through digitization or microfiche to address limited storage space.
8. **Controlled Access:** Ensure controlled access to records by restricting non-staff members from entering storage facilities and issuing identity cards to staff members.
9. **Standard File Covers:** Use standard plastic file covers with necessary information to protect records effectively.
10. **Records Management Policy:** Develop and enforce a records management policy to guide staff on accessibility, disposition, and security of records. This policy should outline procedures for filing, storing, and accessing records, as well as for disposing of records once they are no longer needed.
11. **Develop a disaster preparedness plan for records management.** This plan should outline procedures for protecting and evacuating records in the event of a disaster.

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ACRONYMS AND ABBREVIATIONS.

EMR - Electronic Medical Records
ICT - Information Communication Technology
MIHS - Mildmay Institute of Health Sciences
MoH - Ministry of Health
MRMS - Medical Records Management System
WHO- World Health Organization
ECBSS - Electronic Case Based Surveillance System

HMIS-Health Management Information System

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CONFLICT OF INTEREST.

No conflict of interest

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