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MANAGEMENT OF MEDICAL RECORDS FOR BETTER HEALTHCARE SERVICE DELIVERY: A CASE STUDY OF NAROK COUNTY REFERRAL HOSPITAL, KENYA

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ABSTRACT

Purpose: Medical records management is significant in a hospital setup for it ensures that patient medical records are created, maintained, confidential, secured and retrieved easily. Time wastage in locating and retrieving medical records is disadvantageous in a medical institution. This largely affect patient with critical health conditions since medical record retrieval is difficult thus rendering ineffective healthcare services.

Methodology: This study used both qualitative and quantitative approaches with an aim of collecting more data to explain the aim of this research. The combination of the two research approaches gives the researcher the opportunity to collect numeric data. Feelings, opinions and interpretation of both the provider and the user of the healthcare services are based on the management of the medical records at Narok County Referral Hospital.

Results: The study established that Narok County Referral Hospital uses a paper based manual medical records management system which is centralized. At the time of the study this system was serving the hospital without many problems. The few problems that could be identified included the loss or misplacement of patient files which necessitated the opening of temporary files.

Unique contribution to theory, practice and policy: This study focused on the management of medical records only at Narok County Referral Hospital. Narok County Referral Hospital do produce other records apart from the medical records, the study recommends that another study that will focus on other records be conducted.

Keywords: *Electronic Medical Records, Patient Health Records, Narok, Kenya*

INTRODUCTION

Introduction

The creation, retrieval and maintenance of medical records is done by hospitals to form part of its functions. These records provide evident that a given form of transaction took place

Arries, Ebin and Newman (2008) asserts that service delivery is significant to various hospitals. They tell us that services provided by healthcare facilities should be reliable, confidential and customer oriented. For better service delivery, hospitals should ensure that their services are characterized by equity, quality and codes of ethics. Managing records is therefore important to service delivery.

The creation of medical records is an evidence that illustrates that there was an interaction between the patient and healthcare service provider. Information about the patients' medical record is documented, blood pressure, test results and other forms of treatment. These operations make medical records to be a significant part of healthcare service delivery since they contain important information which promotes the continuum of care and treatment (Steward, 2005).

Management of medical records has a history whereby the growth of healthcare facilities has seen paper records become more problematic. Syed-Mohamad et al (2010) illustrates that, paper-based records in Malaysia do not capture the relevant information to be used in the provision of efficient healthcare service delivery thus making it hard for file retrieval. In Kuwait, Al-Azmi et al. (2009) also experienced the same problem whereby there were longevity in the retrieval of medical records. To help the problem associated with paper-based records, many countries adopted the use of information technology (IT) for effective and efficient use to improve healthcare service delivery (Al-azmi et al., 2009).

Background of the Study

Healthcare services are grouped into 6 levels in Kenya; Community Care (level 1), Dispensaries (level 2), Healthcare Centers (Level 3), County Referral Hospitals (Level 4), Provincial Referral

Hospital (Level 5) and National Referral Hospital (Level 6). County referral Hospitals are 47 in number, Provincial Referral Hospital 10 and National Referral Hospital, 2.

Narok County Referral Hospital falls under the 4th level, District level. Local clinics, Health centers and dispensaries in Narok County refer their patients to Narok County Referral Hospital. There are two types of widely used records in a health center; Facility Held Records (FHR) and Patient Held Records (PHR). FHR are kept in the facility and remains the product of the facility while PHR is kept by the patient and can be used at any healthcare facility to provide healthcare. FHR is widely used by hospitals while PHR is used by the local clinics. Patients are normally advised to carry their PHR whenever they visit other health centers as this record contains history of their patient health information.

Statement of the problem

Medical records management is significant in a hospital setup for it ensures that patient medical records are created, maintained, confidential, secured and retrieved easily. Time wastage in locating and retrieving medical records is disadvantageous in a medical institution. This largely affect patient with critical health conditions since medical record retrieval is difficult thus rendering ineffective healthcare services.

Objectives of the study

The main objective of study is to investigate the management of medical records for better healthcare service delivery in Narok County Referral Hospital.

LITERATURE REVIEW

Theoretical Review

Medical Records Management

Healthcare must be dynamic and nations should improve access to affordable healthcare services in response to the Millennium Development Goals (MDGs) which requires a series of intervention that contribute to achievement of health-related MDGs. To achieve accessibility and affordability of healthcare services, an in-depth knowledge of the patients' health information history is captured in the medical records. The information is normally gathered when the patient visits the healthcare facility.

Medical record is defined as a document that records the patient's past history (Nelson and Staggers, 2016). With the availability of these records, the healthcare relies on accurate, complete and comprehensive health information. According to Adesina et al. (2011), a medical record can exist in paper or electronic form. Electronic medical records have solved problems likes missing medical records, misdiagnosis, and service delays and staff shortages. In developed countries, healthcare industries are adopting the use of information communication technologies (ICT) in the creation, maintenance, use and storage of information. Electronic medical records ensure real-time availability to doctors when they need them

RESEARCH METHODOLOGY

This study used both qualitative and quantitative approaches with an aim of collecting more data to explain the aim of this research. Creswell and Clark (2017) argue that the use of both approaches tends to improve the quality of the research and the weakness of one approach is covered by the strength of the other approach. The combination of the two research approaches gives the researcher the opportunity to collect numeric data. Feelings, opinions and interpretation of both the provider and the user of the healthcare services are based on the management of the medical records at Narok County Referral Hospital.

RESULTS AND DISCUSSIONS

Section A: Characteristic of Participants

Profile of the Participant

Fifteen healthcare professionals (75%) and five healthcare users (20%) at Narok County Referral Hospital Took Part in the study (Table 4.1).

Category of Participants	Frequency	Percentage
Healthcare Professionals	15	75%
Healthcare Users	5	25%

Table 4.1: Category of Participants

Gender of the Healthcare Service Providers

Majority of the heath service professionals study participant according to gender distribution were female (60%) while the rest (40%) were male (Table 4.2).

Gender	Frequency	Percentage
Male	6	40%
Female	9	60%

Table 4.2: Gender of Service Professionals

Gender distribution of Healthcare service users.

Gender	Frequency	Percentage

Male	1	20%
Female	4	80%

The study had 4 (80%) female and 1 (20%) male participants. More female used the service during the time of study than males (Table 4.3).

Table 4.3: Gender distribution of Healthcare service Users

Age distribution for the participants

The age ranges were used to categorize study participants. Two (10%) participants were between 15 and 25 Years; eleven (55%) between 25 and 35; and seven (35%) between 35 and 45 years (Table 4.4). The range started at 15-25 years because the study targeted the users who use healthcare service without any assistance of parent and guardian. Also, the healthcare professionals were fully grown people falling on that range

Age ranges	**Frequency**	**Percentage**
15-25	2	10%
25-35	11	55%
35-45	7	35%

Table 4.4: Age Distribution

Level of education of the Health service Providers

Health care service professionals were asked to indicate their level of education. Six (42%) respondents have degrees, seven (49%) have Diplomas, while two (10%) have certificate (Table 4.4).

Education Level	**Frequency**	**Percentage**
Certificate	2	10%
Diploma	7	49%
Degree	6	42%

Table 4.5: Level of Education

Training Received

The researcher sought to establish the competence of the services provided to perform their duties. The respondents (Healthcare Professionals) were asked to indicate if they had received any training on the maintenance of medical records. Thirteen (87%) respondents indicated to have gone through training while two (13%) had no training (Table 4.6).

	Frequency	**Percentage**
Received Training	13	87%
No Training Received	2	13%

Table 4.6: Training Received

Section B: Current medical records management practices

Record Creation

Records are created on a daily basis. The researcher tried to find out the creation of medical records at Narok County Referral Hospital. Ten respondents outlined that medical records are created

manually at the Out-Patient Department (OPD) using a clean folder to register patients. The patient is required to pay Kshs. 50, then identify him/herself using and Identity Card and a referral letter from local clinic if there is. The medical records contain the patients personal and medical information. The process is completed by giving a patient a card which should be produced during the next visit. After creating the record, the patient waits to be examined. If the medical user is to be admitted as in-patient, he/she pays Kshs. 100 for the opening of a folder

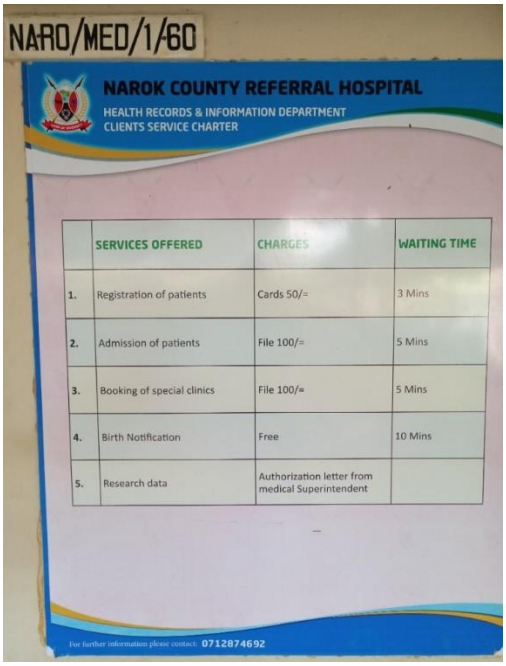

Figure 4.1: Medical Records Creation

Medical Record Creation Rate

The researcher also tried to find out the rate at which medical records were created on a daily basis. Thirteen respondents (87%) indicated that over 25 medical records are created on a daily basis while two (13%) respondent indicated that less than five medical records are created on a daily basis. The hospital medical administrator indicated that the hospital receives more patient on Mondays than any other day (Table 4.6).

Medical records creation rate	Frequency	Percentage
Over 25	13	87%
Less than 5	2	13%

Table 4.6: Training Received

Medical Records Retrieval

Each patient visiting any hospital for should be assigned with a unique number which will help in the identification of the patient's folder whenever he/she visits the hospital (IRMT, 1999).

The researcher sought to determine the infrastructure used in the retrieval of medical records whereby the respondents were asked to indicate the procedures used in the retrieval of medical records. All the respondents indicated that the medical records are retrieved manually by the use of patient's unique number. The researcher observed that when the patient first reports to the reception desk, their hospital cards are collected to be used for the retrieval of medical records.

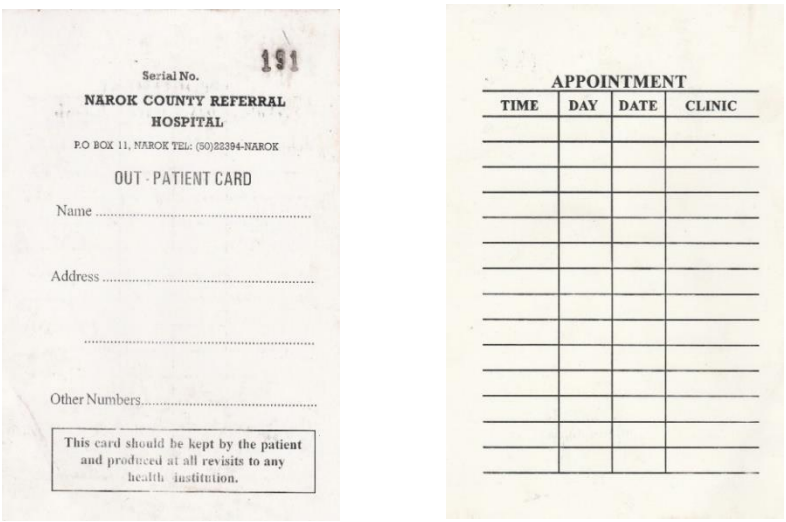

Figure 4.2: Out-Patient Card used in the retrieval of medical records

Missing medical records

Missing medical records makes it difficult for practitioners to provide the required healthcare (Ting et al, 2011). Therefore, the researcher sought to investigate the efficiency of the medical records managements system in the hospital in terms of the retrieval of medical records. The respondents were asked to describe the procedure followed when a patient folder is not located. Eleven respondents (73%) indicated that that a temporary folder is opened and when the original folder is found, the notes are merged together while four (27%) indicated that the folder is searched until it is found (Table 4.7)

	Frequency	**Percentage**
Temporary folder creation	11	73%
Searching for folder	4	27%

Table 4.7: Missing medical records

Missing folders replacement

The researcher investigated the frequency of misfiled folders that led in the creation of new folders each time a patient revisits the hospital. The respondents were asked to indicate if it was appropriate to create a new folder if the previous one could not be located. All the respondents indicated that it was appropriate to create new folder. The researcher further asked for reasons for their answers whereby they stated that by opening a new folder it minimizes the waiting period. However, the staff keep searching for the original folder until it is found and they merge the two folders.

Effects of new Folder on patient's healthcare

The researcher had to analyze if there is any negative impact caused by the creation of new folder. The respondents were asked for the effect of new folder in the continuity of care and healthcare service delivery. All the fifteen respondents pointed out that the creation of new folders affects the patient's history and the chronology of diseases/diagnosis and should be the last resort

Retrieval Time

According to Hartmann and Sooklal (2012), much of the waiting periods in the hospital are caused by wasteful process before and after treatment. It is often caused by time spent in locating medical records. The researcher asked the respondents to determine the length of time spent in retrieving individual patients' folder. Fourteen respondents (93%) indicated that it takes approximately 5 minutes to retrieve the patient folder while one responder (7%) did not answer. However, the researcher observed that the retrieval of folder is generally quick except for those users who revisit the hospital after a long time (Table 4.8).

	Frequency	**Percentage**
Approximately 5 Minutes	14	93%
No Response	1	7%

Table 4.8: Retrieval time

Medical records collection

The researcher needed to establish the control and collection of patient folders from different departments until they are stored in the storage unit. The respondent was asked who is responsible for the collection of medical record whereby four (27%) indicated that the records manager is responsible while eleven (73%) indicated that the records officers were responsible for the collection of patients records from various departments. The records administrator indicated that the records officer and nurses who take the records out of the health record department have the responsibility of returning then. She further indicated that if an inpatient is discharged, it is the duty of the nurses to ensure that the health records is returned to the health record department (Table 4.9).

	Frequency	Percentage
Records manager	4	27%
Records Officers	11	73%

Table 4.9: Medical records collection.

Medical records collection frequency

The researcher also sought to determine how frequent are patient records collected from the hospitals department. Thirteen (87%) respondents indicated that the records are collected daily while two (13%) indicated that they are recorded weekly. The records administrator indicated that the records are collected daily from different departments of the hospital to be filed and stored in the health records department (Table 4.10).

	Frequency	Percentage
Collected Daily	13	87%
Collected Weekly	2	13%

Table 4.10: Medical Records Collection Frequency

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

The study established that Narok County Referral Hospital uses a paper based manual medical records management system which is centralized. At the time of the study this system was serving the hospital without many problems. The few problems that could be identified included the loss or misplacement of patient files which necessitated the opening of temporary files. The use of temporary files carried the risk of compromising the quality of health services given since the health professionals were unable to benefit from the previous healthcare history of a patient with

a temporary file Each new and revisiting patient had a single folder detailing their personal information and healthcare history. They were required to pay fee of Kshs. 50 the day the file was created which was paid once. If the patient is to be admitted, a fee of Kshs. 100 was paid for the opening of a patients file.

Conclusion

The creation, maintenance, use and disposal of medical records at Narok County Referral Hospital are currently effectively under control. This is supported by the fact that there is a consistent system of creating records, classification and retrieval. Medical records are directly related to a quality and better healthcare service delivery. A failure to retrieve a patient folder that contains medical record of that particular patient may have implications on the medical prescription, reordering of diagnostic tests which are sometimes expensive to reproduce and the loss of precious patient health information history.

Recommendations

The findings of the study established that Narok County referral Hospital is using manual records management systems. The manual record management system has its limitations which the hospital is not immune from. The problems of patient folder retrieval, missing or lost files were reported in other countries as discussed in chapter two. Medical records serve as communication medium amongst health professionals and therefore the missing medical record breaks that communication and makes it difficult to make decisions on the diagnosis and treatment of a patient. Time spent in the retrieval of patient folders affect the quality of service.

Most developed countries have invested on the use and integration of Health Information System (HIS) technology in hospitals. In future, the study recommends the implementation and the use of electronic medical records in Narok County Referral Hospital. Electronic Medical Records promotes the delivery of quality service, enhanced service and timeous healthcare service. Efficient and effective healthcare service delivery is what all citizens need.

Area of Further research

This study focused on the management of medical records only at Narok County Referral Hospital. Narok County Referral Hospital do produce other records apart from the medical records, the study recommends that another study that will focus on other records be conducted.

Since the hospital is currently using the manual records management system, the study recommends another study that will look at the feasibility of the implementation of the Electronic Medical Records management system.

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