

## Full Length Research

# Methods of documentation of medical records at the Rivers State University Teaching Hospital

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### Abstract

The objective of this study is to evaluate the Methods of documentation of medical records at the Rivers State University Teaching Hospital. The study focuses on the method of documentation of medical records. The research study design of this study was survey design. The population of the study comprised of 356 healthcare providers at Rivers State University Teaching Hospital, Port Harcourt. The data collected or gathered from the administration of the instrument were analysed using the IBM Statistical Package for Social Science (SPSS) version 25. The data collected were analysed and used to this study. The results from the study revealed differ on the methods of documentation of medical records. The table also showed that  $t(1) = 1.284$ ,  $p = .094$ ; the  $p$ -value is greater than the chosen alpha value of 0.05 ( $p > 0.05$ ). Therefore, the null hypothesis is not rejected, meaning that there is no significant difference on the methods of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital. Therefore, the study concluded that there is no difference on the methods of documentation of medical records from both facility and also it revealed that there is no significant difference on the methods of documentation of medical records in Rivers State University Teaching Hospital.

**Keywords:** Methods of documentation, HealthCare, Mmedical records, Ddocumentation, Healthcare providers

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## INTRODUCTION

Medical record documentation encompasses various methods and formats used by healthcare professionals to record and maintain patient information. These methods are designed to ensure accuracy, accessibility, and confidentiality of patient data. Methods of medical record documentation include:

**Paper-Based Records:** Traditional paper-based documentation involves the use of physical forms, charts, and files to record patient information. This method has been widely used in healthcare for many years. It typically involves handwritten entries by healthcare providers, including physicians, nurses, and other clinical staff. Paper records are organized in folders or binders, and they are stored securely in filing cabinets or storage rooms. While this method is familiar, it can be time-consuming, prone to errors, and may require extensive physical storage space.

**Electronic Health Records (EHRs):** EHRs are digital versions of patient medical records that are stored electronically in a secure computer system or cloud-based platform. They allow for real-time documentation, retrieval, and sharing of patient information among authorized healthcare providers. EHRs can include a wide range of information, such as medical history, test results, medications, allergies, and treatment plans. This method enhances accessibility, legibility, and can improve communication among healthcare team members.

**Voice Recognition and Dictation:** Some healthcare providers use voice recognition software to dictate patient information directly into electronic records. This technology converts spoken words into text, eliminating the need for manual typing or writing. It can save time and improve the efficiency of documentation.

**Structured Data Entry:** Structured data entry involves using predefined templates or forms within EHR systems to record specific types of information. Healthcare providers fill in fields or checkboxes, ensuring consistency and standardization in the documentation process. This method can help capture essential data points efficiently.

**Barcode Scanning:** Barcode scanning involves using barcode technology to link physical items (such as medications or lab samples) to electronic records. This method reduces the risk of errors in medication administration and ensures accurate tracking of specimens.

**Mobile Device Applications:** Some healthcare providers use mobile applications designed for secure and convenient documentation on tablets or smartphones. These apps may offer features like voice recording, photo capture, and electronic signatures.

**Hybrid Systems:** Hybrid systems combine elements of both paper-based and electronic documentation. They may involve scanning paper documents into an electronic format, allowing for a transition towards full EHR adoption. Selecting the most appropriate method of documentation depends on factors such as the healthcare setting, available resources, technological infrastructure, and provider preferences. Regardless of the method used, accurate and thorough documentation is essential for providing high-quality patient care, facilitating communication, and ensuring compliance with regulatory standards.

Murray et al. (2021) study on unified documentation and information retrieval for electronic health records with the adoption of the MedKnowts model revealed that clinical documentation can be transformed by Electronic Health Records, thus far the documentation process is still tedious, time-consuming, and error-prone process. The findings showed that clinicians are faced with multi-faceted requirements and fragmented interfaces for information exploration and documentation, and these challenges are only exacerbated in the Emergency Department where clinicians regularly see 35 patients in one shift, during which they have to synthesize an often previously unknown patient's medical records in order to reach a tailored diagnosis and treatment plan. The results revealed that to better support the information synthesis, clinical documentation tools must enable rapid contextual access to the patient's medical record. The study revealed MedKnowts as an integrated note-taking editor and information retrieval system which unifies the documentation and search process and provides concise synthesized concept-oriented slices of the patient's medical record. The study concluded that MedKnowts automatically captures structured data while still allowing users the flexibility of natural language, and as well has the potential to make clinical documentation truly work for clinicians by creating a live document that supports customized information retrieval, note taking, and collaboration while simultaneously improving the final note that is shared with downstream doctors and patients.

According to Beltran-Aroca et al., (2016) study titled "confidentiality breaches in clinical practice: what happens in hospitals?" a direct observational method was used to examine recruited students enrolled in the Medical Degree Program at the University of Cordoba real situations in which there has been a breach of confidentiality in a tertiary hospital. The results identified respect for confidentiality as important to safeguard the well-being of patients and ensure the confidence of society in the doctor-patient relationship. The observers recorded their entries on standardized templates during clinical internships in different departments like Internal Medicine; Gynecology and Obstetrics; Pediatrics; Emergency Medicine; General and Digestive Surgery; Maxillofacial Surgery; Plastic Surgery; Orthopedics and Traumatology; Digestive; Dermatology; Rheumatology; Mental Health; Nephrology; Pneumology; Neurology; and Ophthalmology. Results showed severe breaches were the most frequent, accounting for 46.7 % of all incidents, and most of the reported incidents were observed in public areas (37.9 %), such as corridors, elevators, the cafeteria, stairs, and locker rooms. The study concluded that all healthcare personnel is involved in confidentiality breaches, especially physicians.

Mokhtar and Yusof, (2016) examined records management practice: the issues and models for classification with the adoption of survey method, interview, and document content analysis as the techniques in analyzing the models. The results showed classification as paramount for complete records management other than safeguarding vital records upon determining their value for business continuity, and electronic records management practice with particular reference to Syariah Courts in Malaysia specifying on classification matter was identified. Findings revealed that a model generally takes the form of inputs, processes, and outputs or expected results in a simplified representation of a limited part of reality with related elements. Results further showed flaws in the existing models thereby making them

inappropriate for implementation as they are too theoretical in nature. The study concluded that none of the models' analyzed addressed issues on records classification, and the interviews depicted that no model was adopted in the practice of electronic records management in the Syariah Court. The study determined records management practice in the aspect of classification, hence documentation of records that is practiced throughout the records management life cycle and continuum needs to be assessed to bring to the fore its findings in contributing to knowledge acquisition and sharing for problem-solving.

Singh and John, (2017) study using a convenience sampling technique with a total of 200 patients' files for the analysis of the health record documentation process as per the national standards of accreditation with special emphasis on tertiary care hospitals in X Hospital in Delhi and to review the health records and evaluate them to find the incongruity in the documentation of patient's data by doctors, nurses and other healthcare providers involved in the documentation process. Findings identified two major reasons why standard documentation of health records is important- it will help in the scientific evaluation of patient profiles, analysis of the treatment results, and plan of appropriate treatment protocols on one side and the other reason is that it will assist in planning governmental strategies for future medical care.

Elikwu, Igbokwe, and Emokhare, (2020) studied the effect of electronic health information systems on medical records management in public healthcare institutions employing the numerical and qualitative research philosophy and adopted the survey and case study research strategies including cross-sectional and qualitative research designs. Findings showed study sample covered 332 respondents spread across four selected Federal Medical Centres in Makurdi, Keffi, Lokoja, and Abuja FCT, all located in the North Central Region of Nigeria. Results identified the worrisome state of Nigerian hospitals in the last decades owing to a lack of adoption of the global trend on information systems to move away from healthcare delivery characterized by inefficiencies, and poor management practices evidenced by continuous use of the traditional paper record system in most public health facilities in Nigeria, which often time causes delay and long patient waiting time, resulting in cases of infant and maternal mortality. The study concluded that though, there is still substantial reliance on traditional paper-based records system, but, the adoption of eHIS will reduce the risk of treatment errors, decrease patient waiting time, enhance timely communication among practitioners, protects patient information from unauthorized personnel, and enhance quality healthcare service delivery. The study recommended among others that the government and hospital management should prioritize the provision of necessary infrastructure in the health capital budget to support the adoption and implementation of the electronic health information system to reduce high mortality rates from perpetual delayed treatments and preventable medical errors.

Matlala and Maphoto, (2020) study on the application of the records life-cycle and records continuum models in organizations in the 21st century focused on the records continuum model, developed in Australia's archival sciences field in recent years, and discussed its implications for the practice of records and archival management. A descriptive examination was adopted in tracing the historical development of records management approaches, as well as their significance to the records management practices and their limitations. Results showed that prior to the emergence of the records continuum model, records life-cycle theory dominated most records management fields globally and that the records continuum model responds in ways that the records life-cycle theory is unable to deal with the challenges of electronic records and proposes a new set of management thinking of the preservation of the electronic environment, in which existing institutions and their associated electronic records coexist. Results also showed that literature was reviewed within a qualitative and interpretative paradigm basically on historical and narrative analysis. Findings have proven evidence of the practice of the records management theories in organizations, and the study concluded that records management practice in organizations could be enhanced if specific factors within each record management method are given adequate attention in their application.

Durodolu, Mamudu, and Tsabedze, (2020) empirically assessed the management of electronic records for service delivery at the University College Hospital, Ibadan, Nigeria. An interpretive research paradigm that was anchored on qualitative research methods and approaches was used, along with interviews as a means of data collection from the Senior Health Records Officer in the Health Record Department of the University College Teaching Hospital (UCH) affiliated with the University of Ibadan. The result showed that healthcare providers have, over the years, struggled with the management of patient records, and the struggle became exaggerated as information became increasingly large and convoluted. The contemporary healthcare environment is characterized by information overload; without the proper organization of information resources, access to valuation resources can become an albatross, if not properly managed. Health information is the data associated with the medical ailment of a patient's history, containing symptoms, diagnoses, procedures, and results. Quick access to this vital information may be a life-and-death decision that must not be taken for granted. Findings showed that although electronic records are considered vital to the UCH activities in terms of patient's medical history and decision-making, there was no control measure for ensuring the care of electronic records and their availability over time. Results further showed that the strategies used for managing electronic records were ineffective and have led to the loss of vital information, and hampered accessibility to records over time. The study

recommended that the hospital should raise awareness amongst healthcare and other staff on the importance of managing records, and Staff responsible for records should be equipped with knowledge and skills in electronic records management.

Ngo et al. (2016) investigated the importance of the medical record: a critical professional responsibility. Findings showed that comprehensive, detailed documentation in the medical record is critical to patient care and to a physician when allegations of negligence arise, hence physicians should be prudent to have a clear understanding of the documentation. Findings further indicated that it is important to understand who is responsible for documentation, what is important to document, when to document, and how to document, who owns the medical record, and the significance of the transition to the electronic medical record including problems and pitfalls when using the electronic medical record, and how the HITECH Act impacts healthcare providers and health information technology. The study recommended that healthcare providers must implement practices and policies that will meet all the documentation policies.

Good documentation is crucial to a data collection's long-term vitality; without it, the resource will not be suitable for future use and its provenance will be lost. Proper documentation contributes substantially to a data collection's scholarly value. At a minimum, documentation should provide information about a data collection's contents, provenance and structure, and the terms and conditions that apply to its use. It needs to be sufficiently detailed to allow the data creator to use the resource in the future, when the data creation process has started to fade from memory. It also needs to be comprehensive enough to enable others to explore the resource fully, and detailed enough to allow someone who has not been involved in the data creation process to understand the data collection and the process by which it was created.

Similarly, Huffman (2021) stated that medical records are linked to the term who, what, why, where, when, and how of the patient care during an episode of care rendered. She further opined that the idea behind the terms is to provide care to the beneficiaries through careful documentation of every detail of healthcare activities that have with the patient/client.

Medical records which are also called hospital records according to McGibony (1952) in Aqyeman, et al (2018) are a chronicle of both medical and scientific processes found in the hospital. Medical records have been adjudged as an important primary tool in the practices of medicine, and literature has also revealed medical records as a storehouse of knowledge concerning patients' care and medical history. Sahile, et al., (2020) averred medical records as a collection of data on patients including but not limited to history, statement of the current problem, diagnosis, and treatment procedures. Furthermore, medical records contain details of patients' medical care and demographic data like name, address, gender, and date of birth among others (Natrayan, 2010).

Medical records compiled timely in a manner should also contain sufficient data to identify the patient, support the diagnosis or reason for health care episode to justify treatment, and accurately document the results to have visible evidence, of hospital clinical activities and accomplishments. Globally, proper management of medical records in health facilities has been a challenge ranging from loss of patients' case notes, improper filing, lack of records retention and disposal policy, and engagement of non-professionals in medical records management practices (Danso, 2015; Ondieki, 2017).

Oftentimes, medical records are either in the format of paper-based or electronic-based. But, the management of individual health facilities adopts and implements the format that it feels best suits its activities. According to Adeleke (2014), a paper-based medical record is seen as a systematic collection of patients' personal information which includes health history that is documented or written on a paper form. In contrast, Berg (2001) observed electronic medical records format as a computerized medium that accommodates clinical information recorded based on healthcare providers' interaction with patients/clients in the course of healthcare service delivery. However, Torray (2011) opined that electronic medical records (EMR) as an e-version of patients' health information that has been created, used, and stored in a paper chart for future usage by authorized persons.

Medical records can be viewed through the following indicators, accessibility, filing, retrieval, dissemination, and usage. Accessibility of medical records can be beneficial to both, the patients, clients, the caregivers as it enhances prompt communication between the two-party as well as helps the patients to better understand their health condition, and this is usually achieved through proper documentation. Filing of medical records involves a systematic way of arranging patients' case notes in the hospital using a defined criterion. Furthermore, the management of medical records in the hospital which involves proper filing, enhances prompt retrieval, dissemination, usage, and proper continuation of care not to be aligned with appropriate documentation.

Documentation according to Isaruk (2021) is the act of capturing/creating or entering data elements or information on treatments rendered to patients or organizational business transactions within or outside its environment using approved formats and methods. He further maintained that documentation of health or medical records must comply with a stipulated standard like clear and accurate capturing or recording of things or activities in a legible manner with the use of signs, symbols, and abbreviations that were appropriate for readability, sharing, and reproducibility when future

demands occur.

Wang, Yu, and Halley (2013) opined that the documentation process, format, and structure, focus mainly on the completeness and accuracy of detained medical records. According to Hasanain and Cooper (2014), documentation of medical records is an integral part of good health professional practices in the delivery of quality care, whether it is in paper-based or electronic base records management. This helps in communication amongst professionals, eases continuity of care, and also helps to guarantee good quality healthcare to patrons. To ascertain effective and efficient health service delivery to people, medical records documentation is required to record, facts, results, and investigations as well as an observation about an individual's health history, as well as past and present illnesses, and plan of alternatives for future care management. Hence, the quest for a comparative study of the assessment of documentation of medical records in public hospitals in Rivers State, South-South Geopolitical Zone, Nigeria is to use the findings in contributing to knowledge and solving certain challenges in the management of healthcare in hospitals.

### **Statement of the Problem**

Medical records are scientific data that support and serve as evidence of services provided by healthcare practitioners in hospitals to patients/clients irrespective of their diverse health situations. However, studies have shown that medical records in the majority of hospitals in developing nations are often not well carried out in tandem in meeting up its primary (patient care) and secondary (administrative) purposes thereby leading to poor quality of healthcare services delivery (Danso, 2015; Luthuli & Kalusope, 2017). In Nigerian hospitals, Ajayi (2010) posited that the continuous long waiting time for patients to get their medical records before being seen, treated, or referred by healthcare providers in public hospitals has been a challenge over time. Similarly, Omang, et al., (2020) averred that the issue of the long waiting times of patients at public healthcare facilities is becoming a major challenge to Nigerians across the different regions of the country. In addition, long waiting time also presents challenges for healthcare providers and managers because it denies them the opportunity of connecting with the patients due to a loss of confidence in the healthcare service delivery system (Omang et al., 2020). Hence, the study is to evaluate the Methods of documentation of medical records at the Rivers State University Teaching Hospital.

### **Objectives of the Study**

The objective of this study is to evaluate the Methods of documentation of medical records at the Rivers State University Teaching Hospital. The specific objective of this study is to:

1. Find out the methods of documentation of medical records at the University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital.

### **Research Questions**

The following research questions are formulated to guide the study:

1. What are the methods of documentation of medical records at the University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital?

### **Hypotheses**

Three null hypotheses is formulated by the researcher to guide this study.

$H_{01}$ : There is no significant difference on the methods of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital.

## METHODOLOGY

The research study design used in this study is a survey design. The population was and 356 healthcare providers at Rivers State University Teaching Hospital. Total enumeration was adopted for the study. The nature/sources of data for this study is the primary source, it is a questionnaire. Data for this study were collected through the primary sources of data. The data collected or gathered from the administration of the instrument were analysed using the IBM Statistical Package for Social Science (SPSS) version 25.

## RESULTS AND DISCUSSION OF FINDINGS

This section presented the results from the analysis of data administered to the representative sample and discussion. The results section was analysis of respondents.

**Research Question One:** What are the methods of documentation of medical records at the University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital?

**Table 1:** Methods of Documentation of Medical Records in UPTH and RSUTH

Items	Hospital				$\chi^2$	P Value
	UPTH = 199		RSUTH = 147			
	Yes(%)	No(%)	Yes(%)	No(%)		
In my hospital manual method (paper-base) method of documentation is always used	150(75)	49(25)	120(82)	27(18)	1.475	.225
In my hospital is Hybrid (paper-based and Electronic) documentation methods used	114(57)	85(43)	84(57)	63(43)	6.285	.112
In my hospital, electronic documentation of medical records is the only method in use	26(13)	173(87)	30(20)	117(80)	2.497	.114

In Table 1. above, majority of the respondents from health facility accept most the items "In my hospital manual method (paper-based) method of documentation is always used" RSUTH = 120(82%), "In my hospital is Hybrid (paper-based and Electronic) documentation methods used" RSUTH = 84(57%). However, they both disagree on this item "In my hospital, electronic documentation of medical records is the only method in use" RSUTH = 117(80%). From the analysis of the participants' responses when compare; it revealed that there is no differences on the methods of documentation of medical records from both facility.

Also in Table 1, all the p-value of the Pearson chi-square is above the significant alpha value of 0.05. It also revealed that there is no difference on each of the items on the methods of documentation of medical records from both facilities.

## Test of Hypotheses

**Hypothesis One:** There is no significant difference on the methods of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital.

**Table 2:** Independent Samples Test on Methods of Documentation of Medical Records between UPTH and RSUTH

Health Facilities	N	Mean	Std. Dev.	Df	t-value	p-value	Decision
UPTH	199	1.457	.723	344	-1.679	.094	Not Significant
RSUTH	147	1.592	.747				

In Table 2 above, UPTH ( $M = 1.46$ ,  $SD = .72$ ) and RSUTH ( $M = 1.59$ ,  $SD = .75$ ), when compare did not differ on the methods of documentation of medical records. The table also showed that  $t(1) = 1.284$ ,  $p = .094$ ; the p-value is greater than the chosen alpha value of 0.05 ( $p > 0.05$ ). Therefore, the null hypothesis is not rejected, meaning that there is no significant difference on the methods of documentation of medical records in Rivers State University Teaching Hospital.

## Discussion of Findings

The results revealed that there is no difference on the methods of documentation of medical records from both facility and also it revealed that there is no significant difference on the methods of documentation of medical records in Rivers State University Teaching Hospital. This finding is similar to the findings of Aina et al. (2020). Aina et al. (2020) study scrutinized clinical documentation by medical doctors as a factor affecting patient care management and goes a long way to determining the quality of care given to patients in Federal Teaching Hospital, Ido - Ekiti Nigeria. The result disclosed that a larger percentage of respondents agreed that the objectives of clinical documentation in patient care management are to acquiesce with legal regulatory and institutional requirements that will assure compliance with clinical documentation. Results showed that the use of clinical documentation aids in the continuity of evaluation of patients is high and the use of accurate clinical documentation can help reduce errors by also high extent.

## CONCLUSIONS

The study evaluates the methods of documentation of medical records at the Rivers State University Teaching Hospital. From the investigation, it was revealed that there is no difference on the methods of documentation of medical records from both facility and also it revealed that there is no significant difference on the methods of documentation of medical records between University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital. Therefore, the study concluded that, there is no difference between the study variables in Rivers State University Teaching Hospital on the method of documentation of medical records.

## RECOMMENDATIONS

Based on the significant of the findings, the study made the following recommendation that:

1. The hospital management should enlighten the clinical staff more on the importance of documentation of medical records

## REFERENCES

- Ada, G., (2018). Lecture note on measurement and evaluation in health information management practice. Rivers State College of Health Science & Management Technology, Port Harcourt, Nigeria.
- Adiyia, M. & Ashton, W., (2017). *Comparative research*. Rural Development Institute, Brandon University, Manitoba, Canada.
- Agyeman, C. M., Binfoh, K. A. & Lakhawat, P. S., (2018). Assessing the dimensions of hospital records (medical records) in delivering quality of service to patients. *Pharma Tutor*, 6(8), 1-8. Doi: <https://doi.org/10.29161/PT.v6.i8.2018.1>
- Ahmed, H. A. A., El-Salami, R. M., Ayad, K.M. & El-Deeb, A. E-A. F., (2019). Assessment of medical records documentation in secondary health care facilities in Kafr El-Sheikh and El-Mahalla El-Kubra Cities. *Medical Journal of Cairo University*, 87(1), 183-194. [www.medicaljournalofcairouniversity.net](http://www.medicaljournalofcairouniversity.net)
- Aina, O. M., Musa, A. K. & Opeyemi, O. P. (2020). Importance of effective clinical documentation by medical doctors to patient care management in Federal Teaching Hospital, Ido-Ekiti, Ekiti State, Nigeria. *International Journal of Innovative Science and Research Technology*, 5(7), 462-470. [www.ijisrt.com](http://www.ijisrt.com).
- American College of Obstetricians and Gynecologists (2018). The importance of vital records and statistics for the obstetrician–gynecologist. ACOG Committee Opinion No. 748. *Obstetrics & Gynecology*, 132(2), e78–81.
- Asika, N., (2012). *Research methodology in the behavior sciences*. Learn Africa Plc, Ikeji, Lagos State, Nigeria.
- Beltran-Aroca, C. M., Girela-Lopez, E., Collazo-Chao, E., Montero-Pérez-Barquero, M. & Muñoz-Villanueva, M. C. (2016). Confidentiality breaches in clinical practice: What happens in hospitals? *BMC Medical Ethics*, 17(52), 1-12. DOI 10.1186/s12910-016-0136-y
- Binfoh, K. A., Agyeman, C. M. & Lakhawat, P. S. (2018). Assessing the dimensions of hospital records (medical records) in delivering quality of service to patients. *Pharma Tutor*, 6(8), 1-8. <http://dx.doi.org/10.29161/PT.v6.i8.2018.1>.
- Borbolla, D., Becerra-Posada, F. & Novillo-Ortiz, D. (2019). Legal framework for electronic medical records in the Region of the Americas: definition of domains to legislate and situation analysis. *Rev Panam Salud Publica*, 43(e25),

- 1-7. <https://doi.org/10.26633/RPSP.2019.25>.
- Danso, J., (2015). A study of records management practice at health facilities in Upper Denkyira West District of Ghana. *Advances in Life Science and Technology*, 31, 64-72. [www.iiste.org](http://www.iiste.org)
- Dev, S & O'Farrel, P. (2014). The impacts of hospital accreditation clinical documentation compliance: A life cycle explanation using interrupted time series analysis, *Bmj 2a (online) 4(8) eoo5240-e5240*
- Durodolu, O. O., Mamudu, P. A. & Tsabedze, V. O. (2020). Management of electronic records for service delivery at the University College Hospital, Ibadan, Nigeria. *IGI Global*.119-294.DOI: 10.4018/978-1-7998-2527-2.ch011.
- Elikwu, I. M., Igbokwe, A. C. & Emokhare, G. (2020). Effect of electronic health information system on medical records management in public healthcare institutions. *Unizik Journal of Business*, 3(1), 43-56. 10.36108/unizikjb/0202.30.0140.
- Elkum, N., Fahim, M., Shoukri, M. & Al-Madouj, A., (2009). Which patients wait longer to be seen and when? A waiting time study in emergency department. *East Meditterian Health Journal*, 15(2), 416-424.
- Fomundam, H. N., Tesfay, A. R., Mushipe, S. A., Nyambi, H. T., & Wutoh, A. K., (2021). Medical records documentation of HIV/AIDS clinical services at Primary Health Care (PHC) facilities and its implications on continuum of care and operational research in South Africa. *World Journal of AIDS*, 11, 60-70.<https://www.scirp.org/journal/wja>.
- Funmilayo, O. M., (2020). The factors militating against effective medical record documentation. A case study of Ekiti State University Teaching Hospital Ado Ekiti. *International Journal of Innovative Science and Research Technology*, 5(6), 247-252.[www.ijisrt.com](http://www.ijisrt.com).
- Garba, K. D., (2016). Significance and challenges of medical records: A systematic literature review. Retrieved 24/08/2022 from <https://www.researchgate.net/publication/309034245>.
- Garba, K. D., & Harande, Y. I., (2018). Significance and challenges of medical records: A systematic literature review. *Journal of Advances in Librarianship*, 9(1), 26-31. <https://www.researchgate.net/publication/330039863>.
- Gisemba, R. N., Ngeno, E. & Bosire, E., (2022). Medical records management to support evidence-based medical practice at Kisii Teaching and Referral Hospital, Kenya. *Library Philosophy and Practice*, 6993.<https://digitalcommons.unl.edu/libphilprac/>
- Hasanaian, R. A., & Croper, H. (2014). Solution to overcome technical and social barriers to electronic records implementation in Saudi public and private hospitals of information in developing countries, 8(1),
- Huffman, E. K. (1978). Medical records management (6<sup>th</sup> Ed). Physicians' Record Company, Berwyn, Illinois.
- Isaruk, I. D. (2016). Lecture notes on records documentation system (unpub). School health information management rivers state college of health science & management technology, Port Harcourt, Nigeria.
- Isaruk, I. D. (2021). Health records management practices, referral systems and quality health care service delivery in public health facilities in Rivers State, Nigeria. A Dissertation submitted to the Department of Information Resources Management for the award of Master of Science Degree in Health Information Management, Babcock University Ilishan-Remo, Ogun State, Nigeria.
- Isaruk, I. D., Ikonne, C. N. & Alegbeleye, G. O. (2021). Health records management practices, referral systems and quality healthcare service delivery in public health facilities in Rivers State, Nigeria. *Academic Research Journal on Health Information Management*, 2(1), 1-8. Doi:<https://doi.org/10.14662/arjhim20211030>.
- Kosciejew, M. R. S. (2015) Disciplinary documentation in Apartheid South Africa "A conceptual from work of documents associated practice and their effects" *Journal of Documentation*. 71(1),96-115 <https://doi.org/10.1108/JD-10-2003-0130>
- Ksmil, H, Rachmah, R, Wordani (2018), What is the problem with nursing documentation? Perspective of Indonesia Nurses. *International Journal African of Nursing Sciences*, 9 pp111-114.
- Mathioudakis, A., Rousalova, I., Grant A. A., Saad, N. & Hardaralla, (2016). How to keep good clinical record breaths.12(4), 369-73.
- Matlala, M. E. & Maphoto, A. R. (2020). Application of the records life-cycle and records continuum models in organizations in the 21st century. *Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives*, 39, 81-98. <https://dx.doi.org/10.4314/esarjo.v39i1.6>.
- Mokhtar, U. A. & Yusof, Z. M. (2016). Records management practice: The issues and models for classification. *International Journal of Information Management*, 36, 1265–1273 <http://dx.doi.org/10.1016/j.ijinfomgt.2016.09.001>.
- Motloba, P., Ncube, O., Makwakwa, L. & Machete, M. (2018). Patient waiting time satisfaction at a Tertiary Dental School. *SAD Journal*, 73(6), 400-405.
- Murray, L., Gopinath, D., Agrawal, M., Horng, S., Sontag, D. & Karger, D. R. (2021). MedKnowts: Unified documentation and information retrieval for electronic health records. In *UIST 2021: ACM Symposium on User Interface Software and Technology*, October 10–13, 2021, Virtual. ACM, New York. <https://doi.org/10.1145/nnnnnnn.nnnnnnn>.
- Ngo, E., Patel, N., Chandrasekaran, K., Tajik, A. J. & Paterick, T. E. (2016). The Importance of the medical record: A critical professional responsibility. *Practice Management*, 305-308. [www.greenbranch.com](http://www.greenbranch.com)



- Ogbonna, M., Ayodele, K. M & Ojo, P. O (2020) Importance of effective clinical documentation by medical doctor to patients care management in federal teaching hospital, Ido Ekiti, Ekiti State, Nigeria. *International Journal Innovative of Science and Research Technology*, 5(7)
- Omoit, D. F. O. (2021). Compliance with the medical records documentation standard operating procedure among health workers in Bungoma Hospital County, Kenya. A Thesis for the award of the Degree of Master of Science in Health Information Management in the School of Public Health and Applied Human Sciences of Kenyatta University.
- Omang, J. A., Ndep, A. O., Offiong, D. A., Out, F. T. & Onyese, K. N. (2020). Patient waiting time: A public health perspective. *International Journal of Innovative Science Research and Technology*, 5(1), 866-868.
- Ondieki, F. (2017). Effects of health records management on service delivery: A case study of Kisil teaching and referral hospital. *Journal of Hospital and Medical Management*, 3(1), 2-5.
- Osundina, K. S., Kolawole, J. A. & Ogunrewo, J. O. (2015). The role of records management in secondary health care delivery system in selected state hospitals in Osun State, Nigeria. *Information and Knowledge Management*, 5(12), 105-115. [www.iiste.org](http://www.iiste.org)
- Prideaux, A. (2011). Issues in nursing documentation and record-keeping practice. *British Journal of Nursing*, 20(22), 1450-1454. Downloaded from [magonlinelibrary.com](http://magonlinelibrary.com) by 130.113.111.210.
- Sahile, A. T., Teka, M. W., Teshome, M. A. & Jata, T. D. (2020). Medical record documentation system in Ethiopia. *American Journal of Biomedical Science and Research*, 10(4), 375-376.
- Saravi, B. M., Asgari, Z., Siamian, H., Farahabadi, E. B., Gorji, A. H., Motamed, N., Mohammad Fallahkharyeki, M., & Mohammadi, R. (2016). Documentation of medical records in hospitals of Mazandaran University of Medical Sciences in 2014: A quantitative study. *ACTA Inform Med*, 24(3), 202-206. doi: 10.5455/aim.2016.24.202-206.
- Seyf-Rabiei, M., Sedighi, I., Mazdeh, M., Dabras, F., Shokouhi-Solgi M., & Maradi A. (2009). A study of hospital records registration in teaching hospitals Hamadan University of medical sciences, *Sci j Hamdanuniv Med Sci*. 16(2), 45- 59.
- Singh, P. & John, S. (2017). Analysis of health record documentation process as per the national standards of accreditation with special emphasis on tertiary care hospital. *Journal of Health Sciences & Research*, 7(6) 286-292. [www.ijhsr.org](http://www.ijhsr.org)
- Stedman's Medical Dictionary 28<sup>th</sup> edition (2006). Lippincott Williams & Wilkins, Baltimore, Maryland, USA.
- Supriadi, & Dewi, N. (2019). Factors causing incomplete filling of medical records of inpatients in private hospitals X Tangerang City. AIPHC 2019, October 09-11, Padang, Indonesia. DOI 10.4108/eai.9-10-2019.2297246.
- Tasew, H, Mariye, T., & Teklay, G. (2019). Nursing documentation practice and associated factors amongst nurses in public hospital Tigray, Ethopia. *B.M.C Research Notes* <https://doi.org/10.1186/513104-019-466.x>
- Tiechman P. G. (2000). Documentation for reducing malpractice risk. *American Academy of Family Physicians*,
- Torrey A. (2011). Electronic health records and electronic medical records ethics, and EMR(s) patients' empowerment at [Algot.com](http://Algot.com). *teachingpatients.to* take care of their medical and health records.
- Tsalits, M. H., Muhammad, M. & Ekowati, S. K. P. (2018). The incompleteness of medical record documents: Causative factor and solution studied on private hospital in Malang City. *International Journal of Science and Research*, 7(7), 576-580. DOI: 10.21275/ART20181875.
- Varela, H. L., Wiebe, N., Niven, D. J., Ronksley, P. E., Iragorri, N., Robertson, H. L. & Quan, H. (2019). Evaluation of interventions to improve electronic health record documentation within the inpatient setting: A protocol for a systematic review. *Systematic Reviews*, 8(54), 1-6. <https://doi.org/10.1186/s13643-019-0971-2>.
- Victory B. C., (2018). Concept of documentation. *Journal of Documentation*, 34, 270-287.