IJHRIM

Intl J Health Recs & Info Mgt. Jan – Dec 2023;6(1):12-17

Research article

Print ISSN 2645-2464; E ISSN 2695-1770

Assessment of discharge summaries in the patients' health records at a public tertiary hospital in North-Central Nigeria

Ibrahim Taiwo Adeleke[1,2], Lateef Mosebolatan Ogundiran[2], Qudrotullah Bolanle Suleiman-Abdul[3], Ahmed Bolakale Jimoh[2], Yahaya Sule Eidah[4], Marauche Oguzierem[5], Abdullateef Adisa Adebisi[2], Usman Isah[2], Jimoh Opotu Lawal[2]

[1]Editor-in-Chief, International Journal of Health Records & Information Management; [2]Department of Health Records, Federal Medical Centre, Bida, Nigeria; [3]School Complex, University of Ilorin Teaching Hospital, Ilorin Nigeria; [4]Department of Health Information Management, Kogi State College of Health Technology, Idah, Nigeria; [5]School of Public Health, University of Port Harcourt, Port Harcourt, Nigeria

Corresponding author*: E-mail: *aitofiseyin@yahoo.com*

ABSTRACT

Background/Objectives: Discharge summary is an essential documentation tool in the patients' health records that recapitulate the very essence of seeking care. It is the most versatile communication tool in the patients' health records. The quality of documentation in the discharge summaries is waning and there are recorded cases of gross under-utilization of the summaries, illegible documentation and recurrent record deficiencies in the patients' health records. ***Design/Methods:*** The study was a retrospective review of health records of inpatients discharged in the hospital between 1st January and December 31st 2015. A health records review form adapted from WHO was used to assess the quality of discharge summary. ***Results:*** Most of the inpatient health records were found without completed discharge summary form, whereas the majority of these records were clinically coded. ***Conclusion:*** The challenges of gross under-utilization of discharge summaries persists in the index hospital even after a ten years gap of a data quality study in the hospital. Attitude of physicians toward clinical documentation tends to threaten effective communication among care givers and as a result, may negatively affect care process and service delivery to the teeming patients. The study therefore recommends institutionalization of clinical documentation improvement program, training and retraining of all healthcare providers on the imperatives of quality documentation.

Keywords: Clinical documentation; Data quality; Health data; Discharge summary; Patients health records

Edited by *BK Ayilegbe; submitted on 25.09.2023; peer reviewed by SA Omokanye, WA Adeoye, KK Adesanya; accepted 17.10.2023; published 24.11.2023.*

Please cite as: *Adeleke IT, Ogundiran LM, Suleiman-Abdul QB, Jimoh AB, Eidah YS, Oguzierem M, Adebisi AA, Isah U, Lawal JO. Assessment of discharge summaries in the patients' health records at a public tertiary hospital in North-Central Nigeria. Int J Health Recs & Info Mgt. 2023;6(1):12-17.*

Conflict of interest: None declared.

Funding disclosure: No funding was solicited for nor obtained for this study

INTRODUCTION

A discharge summary (or clinical resume) is the handover document that explains to the next healthcare provider contributing to the care of a patient, the reasons for the patient hospitalization, treatments and services received in the hospital and all information needed to pick up the care of the patient quickly and effectively[1]. A hospital discharge summary is a document prepared by the attending physician (usually a junior physician) of a hospitalized patient, which summarizes the admitting diagnosis, the diagnostic procedure performed, therapy received while hospitalized, clinical course during hospitalization, prognosis and plan of action upon the patients' discharge, with stated time to follow up[2].

It must briefly contain reasons for hospitalization, significant findings, procedures and treatments provided, patients' discharge condition, patient and family instructions (as appropriate) and the attending physician's signature[3]. The discharge summary is a universal veritable tool that facilitates quality

communication between care providers, enhances clinical coding process and it is a concise recapitulation of the patients' course in the hospital[4].

Health records document the pertinent facts of a patients' life and health history, including past and present illness (es) and treatment(s) and they are the visible evidence of the hospital's clinical activities and accomplishments[5,6]. Documentation in the patient health records is an important legal and professional requirement and an essential responsibility of all healthcare providers. The records form a key source of data for clinical care, medical research, statistical reports and health information systems. The purpose of keeping these records is to ensure continuity of care and to share relevant information with other members of the multidisciplinary healthcare team[5].

The information contained in the record is essential, but the process of documenting it is often considered a lesser priority by many healthcare givers. The value of health records is ultimately dependent on their completeness and accuracy in providing patients' health information. Inadequate physician documentation may affect the clinical coding process, accurate interpretation of medical charts by coders and consequently, the validity of administrative data[5,7]. Availability of data has always been a challenging task for healthcare system across the globe. For instance, there is a preponderance of fragmented health data in Nigeria and the world over and there exist significant gaps in health data harmonization[8,9].

Discharge summaries are among the most important tools for transferring information from hospital physicians to other physicians and a means of communication between the physicians and Health Information Management (HIM) professionals in charge of clinical coding processes and admission and discharge analysis. It is prepared and permanently inserted into the patients' health records upon discharge of the patient. For optimal care, the discharge summary is transmitted on point-of-care and reviewed by the next healthcare provider attending to the patient[2]. Writing discharge summaries is traditionally the task of junior physicians, learnt either through formal or on-the-job training.

Documenting discharge summaries, like every other clinical documentation component of the patient's health records, is often seen as a lower priority for pressurized junior physicians, who might not have had sufficient feedback and supervision on how to produce high-quality summaries[1,10]. Working with estimates has been proven to have failed in tackling underlying health problems therefore; timely and effective health data quality is important to good healthcare practices[8]. Communication in healthcare is very essential and it is central to practicing medicine. The discharge summary is a veritable tool for ensuring seamless communication among care givers; however, communication among healthcare providers has been poor over time[11]. .

Poor communication in healthcare wastes providers' and patients' time, threatens patients' care, presumes avoidable errors and can lead to injury and death[11]. The quality of discharge summaries documentation is waning and there are recorded cases of gross under-utilization of the summaries, illegible documentation and recurrent record deficiencies in the patients' health records[12]. This has led to poor intra- and inter-professional communications, prolonged patient waiting time due to inefficient information retrieval process, provider's man-hour loss, coding inaccuracy, and difficulty in the continuity of care and it may lead to preventable death. There is growing awareness among physicians and other healthcare providers on these inadequacies and attendant quests to actually understand the contributory factors to the documentation menace in the hospital.

The hospital is also working toward migration from complete paper-based health records onto electronic medical records therefore, efforts need to be in place for clinical documentation quality improvement in order to avoid "*garbage-in garbage-out*" syndrome in the full wake of electronic environment in the hospital.

This study therefore sought to determine availability and adequacy of discharge summaries in the patients' health records at Federal Medical Centre, Bida, Nigeria.

.

METHODS

Study setting

This study was carried out at Federal Medical Centre, Bida, a 350-bed federal tertiary hospital located at the Efu Etsu Yisa ward of the ancient Bida town in Niger State, North-Central, Nigeria. Federal Medical Centre, Bida, which is an offshoot of the Colonial Hospital built in 1937 and later on transferred to Niger State, was established in 1997 as a tertiary hospital owned by the Federal Government of Nigeria. .

Study design

The study was a retrospective review of health records of inpatients discharged in the hospital between 1st January 2015 and December 31st 2015.

Study population (health records)

The patients' health records considered were discharged health records of the 11, 238 patients, who were admitted and discharged in the hospital in the year 2015.

Sample size

From the 11, 238 inpatients' health records within the period, the sample size computed, using the popular sample size calculator, Taro Yamane was 386. The computation goes thus:

$$n = \frac{N}{(1+N(e)^2)}$$

Where:

n = sample size

N = population under study

e = margin error

$$n = \frac{11,238}{(1+11,238\ (0.05)^2)}$$

$$n = \frac{11,238}{(1+11,238\ (0.0025))}$$

$$n = \frac{11,238}{(1+28.095)}$$

$$n = \frac{11,238}{29.095}$$

= 386.25

= 386 patients' health records

Sampling techniques

For records selection, the study deployed systematic sampling method, where n^{th} term was selected across the total records in the hospital during the period under review. The regular format for daily inpatient census, called Daily Ward Statement form was used as the sample frame as it contains hospital unit number (unique identifier) and details of all admitted patients within the period under review.

Data collection tools

The study used a 15-item Health Records Review Form for the evaluation of discharge summaries in the patients' health records. The instrument contains the six major cardinal points of a standard discharge summary. These are patient's details, treatment and medication, principal diagnosis, discharge plans, followup details, physician's details and dates of admission and discharge.

Data analysis and management

The Statistical Product and Service Solutions (SPSS) Version 21 was used to analyze and compute the data. Descriptive analysis featuring frequency distribution was performed.

Inclusion and exclusion criteria

All health records of patients admitted in the period under review were appropriate/eligible for selection into the study.

Ethical considerations

The ethics approval to conduct this study was obtained from the Health Research Ethics Committee of Federal Medical Centre, Bida. Considering the challenges in obtaining granular informed consent from the patients, who are the subjects of the records, a waiver from the Committee was sought for informed consent. Meanwhile, selected records were de-identified such that no part of the individual or collective records can be traced to the research. In other words, any variable, data item or personal identifiable information that can be easily traced or linked to any of the subjects of the records was avoided in order to ensure privacy and utmost confidentiality.

RESULTS

. From Table 1, more (124, 50.8%) of the patients' health records reviewed were from the Male Medical Ward (Ward II) as against the Female Medical Ward (Ward I). Discharge summary form was not inserted in more than half of the records (129, 52.9%), patient name (207, 84.8%) as well as hospital number were not documented in most of the patient s' health records.

Only few (28, 11.5%) of the records had discharge summary completed, date of admission stated; admitting ward stated; treatments and medications stated, principal diagnosis documented; followup details mentioned; physician's name and signature explicit; and date of discharge stated. Discharge plan was clearly documented on few occasions (29, 11.9%) and it is evident that most of the records (234, 95.9%) were clinically coded and code number assigned accordingly.

Table 1: Documentation of discharge summary in the records

Admitting ward	N	%		
Ward I	120	49.2		
Ward II	124	50.8		
	244			
	Yes	**%**	**No**	**%**
Discharge summary inserted	115	47.1	129	52.9
Summary completed	28	11.5	216	88.5
Patient name entered	37	15.2	207	84.8
Hospital Number entered	31	12.7	213	87.3
Date of admission stated	28	11.5	216	88.5
Admitting ward stated	28	11.5	216	88.5
Medications given stated	28	11.5	216	88.5
Principal diagnosis documented	28	11.5	216	88.5
Discharge plans stated	29	11.9	215	88.1
Follow-up details documented	28	11.5	216	88.5
Physician name documented	28	11.5	216	88.5
Physician signed the summary	28	11.5	216	88.5
Date of the discharge stated	28	11.5	216	88.5
Patient's health records is coded	234	95.9	10	4.1

DISCUSSION

Our study of availability, adequacy and correctness of discharge summaries has shown that there has not been any improvement in clinical documentation and health data quality at Federal Medical Centre, Bida since 2012, the year of publication of the first data quality study in the hospital[12]. This is in congruence with the work of Walraven *et al.,* where the effects of discharge summary on hospital readmission was assessed[13]. The study, discovered low availability of this very important document, whereas, reported that in few instances, where the document was available, it decreased the risks of readmission[13].

Similarly, Were, *et al.*, corroborated the findings that the discharge summaries were found not comprehensive enough to reflect tests with pending results; that such deficiencies in documentation could be owing to complex and

systemic reasons and that it may not be due to healthcare providers' experience/skills/attitude, patient characteristics or test characteristics[13,14].

In the same way, Adeleke *et al.,* revealed gross under-utilization of discharge summaries, whereas, reported that in few instances, where the document was available, it was well documented[12]. Were *et al.*. went further to advocate for an improvement in incorporating pending results and follow-up by healthcare providers into the discharge summary[14]. In a related development, So, *et al.* noted that poorly documented charts in the patients' health records compared to well-documented charts thwarted the agreement between chart review data and administrative data; and negatively led to the mis-classification of diagnosis as uncertain.

In a related development, junior residents in a study of discharge summaries decried that information contained in the discharge summaries was not checked for accuracy before being sent to other care providers in the system and that most resident physicians were not adequately equipped to complete discharge summaries[15]. Due to a lack of or poorly written discharge summaries, there was poor information exchange between care providers contributing to the care of the same patient, which may hinder continuity of care to the patient[13]. Improved clinical documentation and communication have been shown to result in improved accuracy of measures of mortality, injury severity, and co-morbidities[16].

When health record is properly managed, it transcends into good patients' care management, better health outcome and improved patient satisfaction. It is the responsibility of all healthcare providers to ensure the maintenance of quality documentation in the discharge summaries and the entire patients' health records.

Limitations to the study

Not all the records enlisted in the sample frame were reviewed due to non-availability of the records on shelves as at the time of data abstraction.

CONCLUSION

The challenges of gross under-utilization of discharge summaries persists at Federal Medical Centre, Bida even after a decade of waiting post data quality study in the hospital. Attitude of physicians toward clinical documentation tends to threaten effective communication among care givers and as a result, may negatively affect care process and service delivery to the teeming patients. .

Recommendations

1. Institutionalization of clinical documentation improvement program has become necessary.
2. Training and retraining of all healthcare providers on the beauty of quality documentation.
3. There is need for a followup study of factors contribution to poor attitude toward discharge summary documentation in the hospital.

Acknowledgement

The researchers wish to appreciate the Mr Ayodele Ishaq for his insightful comments during data collection.

REFERENCES

1. Stopford E, Ninan S, Spencer N. How to write a discharge summary. BMJ. 2015;351:h2696.
2. Anonymous. Discharge Summary. The McGraw-Hill Companies, Inc, 2002. Available at: www.medical-dictionary.thefreedictionary.com/discharge+summary.
3. Kind AJH. and Smith MA. Documentation of mandated discharge summary components in transitions from acute to subacute care. In: Henriksen, K., Battles, J. B., Keyes, M. A., et al., (eds). Advances in patient safety: new directions and alternative approaches, 2008 (vol 2: culture and redesign). Rockville (MD). Agency for Healthcare Research and Quality.
4. Adeleke IT, Ajayi OO, Jimoh AB, Adebisi AA, Omokanye SA, Jegede MK. Current clinical coding practices and implementation of ICD-10 in Africa: a survey of Nigerian hospitals. Am J Health Res. 2015;3(1-1):38-46. doi: 10.11648/j.ajhr.s.20150301.16.
5. Huffman EK. Medical Record Management. 9th Edn. Berwyn, Illinois: Physician's Records Company, 1990;596-597.
6. Durking N. Using records review as a quality improvement process. Home Healthc Nurse. 2006;24:492-502.
7. .So L, Beck C A, Brien S, *et al*. Chart documentation quality and its relationship to the validity of administrative data discharge records. Health Informatics J. 2010;16:101-113.
8. McKee M. Measuring the efficiency of health systems. BMJ. 2001;323:295-296.
9. Adeleke IT**,** Lawal AH, Adio RA, Adebisi AA. Information technology skills and training needs of health information management professionals in Nigeria: a nationwide study. Health Inf Manag, 2014;44(1):1-9. doi:10.12826/18333575/. 2014.Adeleke.
10. Adeleke IT, Usman MA, Suleiman-Abdul QB, Oweghoro BM, Adekanye AO, Adepoju KO, Oyebanji AP, Nwielua BT, Salihu UD, Isah U. Clinicians' burnout and electronic health records use: implications for health data management. Intl J Health Recs & Info Mgt. 2020;3(1):4-14.
11. Gosbee J. Communication among health professionals. BMJ 1998;316:642; Capen K. Findings of negligence followed communication lapses in BC aneurysm case. Can Med Assoc J. 1997;156:49-51.
12. Adeleke IT, Adekanye AO, Onawola KA., *et al*. Data quality assessment in healthcare: a 365-day chart review of inpatients' health records at a Nigerian tertiary hospital. J Am Med Info Assoc. 2012;19:1039-1042. doi:10.1136/amiajnl-2012-000823.
13. van Walraven C, Taljaard M, Bell CM, Etchells E, Zarnke KB, Stiel IG, Forster AJ. Information exchange among physicians caring for the same patient in the community. CMAJ. 2008;179(10):1013-1018.
14. Were MC, Li X, Kesterson J, Cadwallader J, Asirwa C, Khan B, Rosenman, MB. Adequacy of hospital discharge summaries in documenting tests with pending results and outpatient follow-up providers. J Gen Intern Med. 24(9):1002-6.
15. Yemm R, Bhattacharya D, Wright D, Poland F. What constitutes a high quality discharge summary? A comparison between the views of secondary and primary care doctors. International Journal of Medical Education. 2014;5:125-131.
16. Elkbulia A, Godelmana S, Millera A, Bonevaa D, Bernala E, Haia S, McKenney M. Improved clinical documentation leads to superior reportable outcomes: An accurate representation of patient's clinical status. International Journal of Surgery. 2018;53:-288–291.

.**Authors Contribution:**

AIT conceived of the study, initiated the design, participated in literature search, data abstraction and collection, analysis and coordination. OLM, SQB, AAA, JAB, IU and LJO participated in the design, literature search, records retrieval, technical process, data abstraction, data analysis and coordination and reviewed the final manuscript.

ORCID iD

Ibrahim Taiwo Adeleke

https://orcid.org/0000-0001-9118-2089