Improving the Quality of Clinical-records: Audit and Literature Review

Mr. AO Alalade, Dr. Neha Jinsiwale* and Anuradhai Arungunasekaran

Department of Obstetrics and Gynaecology, Wrexham Maelor Hospital, department of obstetrics and gynaecology, United Kingdom

*Corresponding Author: Dr. Neha Jinsiwale, Department of Obstetrics and Gynaecology, Wrexham Maelor Hospital, department of obstetrics and gynaecology, United Kingdom.

Introduction

Medical records comprise systematic documentation of patients' medical history and the care provided. Good medical records are vital for communication between health professionals, they support patient safety and ensure continuity of care. They are documents which are used to defend patients' complaints and clinical negligence claims. If an event is not recorded, it implies it never happened. One of the GMC's good medical practice is that documentation should be clear, accurate and legible. The need for improved communication and record keeping continues to be the theme highlighted in external reviews and inquiries, serious adverse incident investigations and reviews, Coroner's inquests and professional and medical negligence cases (GAIN 2015).

The Health Informatics Unit of the Royal College of Physicians developed the 'Generic medical record keeping standards' in 2007, following reports of poor standards in medical record keeping. In 2009, 'The Audit Commission' warned that poor quality medical records and documentation may lead to significant clinical and patient safety risks and financial risks. They suggested that improving the quality of records will improve the quality of patient care.

Methods

This is a prospective study of medical entries in patients' case notes at a district general hospital (DGH) in the United Kingdom for a period of three months from September to November 2015. Clinical entries were completed manually in patient's case notes. A total of 100 notes were reviewed, 50 from obstetric admissions and 50 from gynecology admissions. Data were collected on a proforma designed in line with the standards of the 'Generic medical record keeping standards' developed by the Health Informatics unit of the Clinical Standards Department of the Royal College of Physicians. Data analysis was done using the Microsoft excel. The findings and recommendations were presented locally in July 2016. The recommendations were also integrated into the induction programme for trainees when rotating to the department.

A re-audit was performed in the same department between January to March 2018 (3months). The same proforma and methods were used to analyze results of 100 notes (50 gynaecology, 50 obstetrics). The data were input onto the Statistical Package for the Social Sciences (SPSS) and 'cleaned' to ensure data inputted were consistent with the content of the paper proformas. Both SPSS and PSPP (a program for statistical analysis of sampled data) were used to run the necessary analyses.

Description of Standards

Generic Medical Record Keeping standards', by Royal College of Physicians.

1. The patient's complete medical record should always be available during their stay in hospital
2. Every page in the medical record should include the patient's name, identification number (NHS number)1 and location in the hospital

3. The contents of the medical record should have a standardized structure and layout
4. Documentation within the medical record should reflect the continuum of patient care and should be viewable in chronological order
5. Data recorded or communicated on admission, handover and discharge should be recorded using a standardized proforma.
6. Every entry in the medical record should be dated, timed (24 hour clock), legible and signed by the person making the entry. The name and designation of the person making the entry should be legibly printed against their signature. Deletions and alterations should be countersigned, dated and timed
7. Entries to the medical record should be made as soon as possible after the event to be documented (e.g. change in clinical state, ward round, investigation) and before the relevant staff member goes off duty. If there is a delay, the time of the event and the delay should be recorded
8. Every entry in medical record should identify the most senior healthcare professional present (who is responsible for decision making) at the time the entry is made
9. On each occasion the consultant responsible for the patient's care changes, the name of the new responsible consultant and the date and time of the agreed transfer of care, should be recorded
10. An entry should be made in the medical record whenever a patient is seen by a doctor. When there is no entry in the hospital record for more than four (4) days for acute medical care or seven (7) days for long-stay continuing care, the next entry should explain why.
11. The discharge record/discharge summary should be commenced at the time a patient is admitted to hospital
12. Advanced Decisions to Refuse Treatment, Consent, Cardio-Pulmonary Resuscitation decisions must be clearly recorded in the medical record. In circumstances where the patient is not the decision maker, that person should be identified e.g. Lasting Power of Attorney

Results

The results of both audits are presented below. A total of 200 case notes was reviewed, 100 from obstetrics and 100 from gynecology admissions. There were a total of 1622 pages. 59.2% (961/1622) of these (pages) had documentation of both first names and surnames of patients. 58.3% (947/1622) of the pages had the identity number of patients clearly printed or the patients' identifier placed. The patients' identifier used was either or both the patients' hospital or National Health Service (NHS) number. Only 89% (178/200) of clinical notes were found to be arranged in a chronological order.

A standardized proforma had been used at initial admission in 89% (178/200) of notes. However, discharge summaries were made on standardized proforma only in 60% (121/200) of case notes. This is because, even though the discharge proformas were used by midwives, the copies of discharge summaries were not filed in the notes.

A total of 3426 medical entries were examined. 86.2% (2955/3426) of these were dated, 95.6% (3278/3426) were timed and 97.5% (3341/3426) were signed. But only 51.8% (1776/3426) of entries had the names of the clinicians reviewing the patient printed at the beginning or the end of the medical entry. The designations of these clinicians were completed or stated in 34.3% (1178/3426) of entries. There was a total of 42 deletions of medical entries noted in the case notes. 16.6% (7/42) of deletions were counter signed. Only 7.1% (3/42) deletions were dated and only 4.7% (2/42) were timed. We identified 45 entries that were documented retrospectively in obstetrics, none identified in gynecology notes. 75.5% (34/45) had documentation of the time of event and the reason for delay in entering the events.

The consultant responsible for patient care was documented in 69% (138/200) of the notes. 5 gynecology patients and 2 obstetric patients had 2 different consultants documented as responsible for care but there was no documentation of transfer of care.

We could not audit on some of the standards due to various reasons. We did not identify any case notes where medical documentation was not performed for more than 4 days. None of the 200 cases needed to make advanced decisions on treatment or resuscitation. We were unable to audit if discharge summaries were initiated at admission. We have not captured data on documentation of the most senior health care professional to make decisions at every entry.

Summary of Results

Criteria	Total- 1st Audit	Total- 2nd Audit	Final results- Both audits together
1.First name and last name documentation in every page	445/752	516/870	961/1622
	59.18%	59%	59.2%
Patient Identity number in every page	431/752	516/870	947/1622
	53.71%	59%	58.3%
2.Notes filed in chronological order	87/100	91/100	178/200
	87%	91%	89%
3. standardised structure Initial assessment proforma used	88/100	90/100	178/200
	88%	90%	89%
Standardized discharge letter used	51/100	70/100	121/200
	51%	70%	60%
Medical entries Number of medical entries dated	515/536	2440/2890	2955/3426
	96%	84%	86.2%
Number of Timed medical entries	482/536	2796/2890	3278/3426
	89.9%	97%	95.6%
Number of Signed medical entries	511/536	2830/2890	3341/3426
	95.34%	98%	97.5%
Number of entries with Printed name	469/536	1307/2890	1776/3426
	87.5%	45%	51.8%
Number of entries with designation entered	382/536	796/2890	1178/3426
	71.27%	28%	34.3%
Number of deletions signed	4/27	3/15	7/42
	14.8%	20%	16.6%
Number of deletions dated	1/27	2/15	3/42
	3.7%	13.3%	7.1%
Number of deletions timed	1/27	1/15	2/42
	3.7%	6.6%	4.7%
Delay in entry, time and reason entered (Obstetric notes)	9/14	25/31	34/45
	64.29%	81%	75.5%
Documentation of responsible Consultant	58/100	80/100	138/200
	58%	80%	69%

Discussion

Medical records provide an objective evidence of an activity performed while caring for a patient. Their primary function is to support patient care, and communication between healthcare professionals [1]. They are also useful for the purpose of clinical governance, performance monitoring, medical education, service planning, and research as well as for resource allocation1. Many times, review of complaints and negligence claims highlight errors or omissions in the completion of medical records. Errors highlighted in the majority of cases are preventable such as lack of patient identification on written documents; no date, time or signed entries; as well as missing pages or illegible writings. These often prevent the cases from being defended adequately in many instances. The

quality of hospital medical records is a frequent source of frustration to clinicians. The need to improve medical records is well recognised and has been emphasised over the years in governmental reports [2].

The standards described by the Royal College relates to a 100% achievement in all of the parameters [3]. This remains a challenge across hospitals as evidenced in this prospective study of 3426 medical entries. However, this is the 'ideal' and would require a concerted effort through education and auditing to ensure that these standards are met and sustained. The local clinical governance teams in various hospitals should ensure that this remains a priority as it concerns the safety of the care we provide to the public.

On comparing the results from both audits, our compliance remains similar except in few areas. There was significant improvement in the use of standardized discharge letter (P-value 0.006). The use of proforma for admission documentation increased as well, however this was not statistically significant. This improvement in use of structured proformas was achieved by ensuring availability of admission proformas at the Accidents and Emergency unit (A&E), availability of discharge proformas in theatre and the creation of electronic discharge summaries for gynecology patients, which was implemented following the recommendations of the first prospective audit.

Kripalani et al have demonstrated that delayed or inaccurate communication between hospital-based and primary care physicians at hospital discharge may negatively affect patient experience and contribute to adverse events [4]. This finding is in agreement with studies reporting that inadequacy in information transfer between hospital-based and primary care physicians negatively affect continuity of care and contribute to adverse events.

We also noted a significant improvement in documentation of responsible consultant in 2nd audit as compared to the first audit (P-value 0.001). This is necessary in the transfer of patient care between responsible clinicians within and across specialties. It also allows continuity of care which reduces the clinical errors as well as improve patient satisfaction and outcome.

On reviewing medical entries, it was noted that printing the of clinician's name and designation at each medical entry was considerably worse in the re-audit. The reasons behind these were not entirely clear. The unit is currently issuing stamps for all doctors and

midwives, which includes their name, designation and registration number. This should help in achieving this standard. Most of the entries were timed and signed by clinician, which is a significant improvement (P-value 0.001), however, dating of medical entries still remains an issue, with the numbers of entries dated dropping significantly in the second audit. (P-value 0.001). Consistently poor compliance for signing and dating deletions was observed in both audits. Clinicians need to be educated in this aspect. The department has recently integrated clinical documentation as a mandatory session at the induction programme.

The liberal use of patient identifying labels can reduce the workload on already strained staff. We have also reiterated the fact that patient identifying details should be available in every page and not just one page per sheet as our case notes get scanned for storage. Educating and supporting staff on the standards required for medical entries will help improve the quality of records. This should start at induction, and be maintained by regular monitoring. 87% of the notes were filed in chronological order in the first audit, which improved to 91% in the second audit. However, filing of notes in chronological order is essentially administrative and should be nearly perfect if the appropriate procedures and responsibilities are clearly stated and staff are adequately trained and monitored.

The Ombudsman's Review 2010 concluded that poor clinical records contribute to errors and substandard care. Because of the potential consequences of poor recording for patient safety, further efforts are warranted to improve the accuracy and completeness of documentation in medical records [5]. The continual increase in the number of claims, complaints and payouts in the National Health Service (NHS) will imply that we need to keep records of the highest standards in order for these to be defended appropriately and successfully. Recording information is both burdensome and time-consuming. The rising demand on the healthcare system as well as the pressure of service targets would imply that we need a more efficient and robust means of recording and transmitting clinical information between the medical teams and hospital in order to deliver and maintain high quality care to the public. Accessibility of medical records remains an issue as well, especially when patients present out of hours or at weekends. Many NHS trusts and hospital health-boards are adapting to or implementing electronic health records. The implementation of an electronic patient record hospital-wide will contribute to the standardization, ease of recording and exchange of patient information which could improve

efficiency and patient safety. However, without improvement in the quality of paper records the full benefits of computerization are unlikely to be realized.

The need to continuously improve the quality of care is fundamental to healthcare delivery. Good record-keeping is a key component of this which not only improve patient safety but also professional communication and conduct. The implementation of change in this aspect of care (good record record-keeping) would require a sustained systemic process of arousing awareness, introduction of changes to achieve efficient and effective means of record collection as well as the application of key performance tools to assess improvement on a periodic basis. Unequivocal and accessible record-keeping guidelines for the documentation of patient information may help in better communication between healthcare providers and will contribute to better patient outcomes and safer healthcare. These guidelines should be incorporated within the training of care providers.

The emphasis should be the continuous or sustained improvement in practice. Therefore, there should be opportunities for service improvement projects to improve data collection in our clinics, safety checks at procedures, and for analyses of such data to address areas of shortfalls. Locally, we have looked changes we can make to improve our medical record entries. This is a continuous process as audits will reveal areas where changes can be made from time to time.

The QUARITE trial in West Africa in 2007 showed that regular audits of medical records improved the completeness of patient registries and record archiving [6]. Robust local audits may help to achieve notable changes and improvement in patient care. In a medical unit in the Western Infirmary in Glasgow, a regular monthly surveillance of discharge documents in the case records resulted in an improvement in some aspects of recording practice. For example, the interval from the patient leaving the ward to the discharge letter being sent to the general practitioner was halved from 20 to 10 days [7]. A regular audit of medical records in a department of medicine at the Queen Elizabeth Hospital, Birmingham, has led to an improvement in the signing of entries in the case notes and in the recording of information given to the patients and relatives3. In the USA, the Joint Commission on Accreditation of Hospitals evaluates the quality of medical records when assessing whether a hospital should be accredited [8]. A hospital's accreditation status is extremely important in determining its success in attracting new staff and patients,

so there is an incentive for the hospital to ensure the maintenance of good records. In the UK, although the Royal colleges expect an adequate standard of records, there is no such external incentive and any improvements have to be be initiated and driven voluntarily at local level. The pursuit of international accreditation could act as a strong incentive for organizations to strive to maintain the standards.

Conclusion

Medical records are important medicolegal documents essential for providing appropriate health care for patients. It is essential to adhere to standards to prove that appropriate care is provided for patients. These also provide the data which are used for scientific research and quality improvement projects. It is the duty of every health care professional to maintain good medical records.

References

1. Mann R, Williams J. (2003). Standards in medical record keeping. Clin Med 3(4):329-32.
2. Nicholson, l. (1996). "Setting the records straight: a study of hospital medical records undertaken by the Audit Commission", Records Management Journal, Vol. 6 No. 1, pp. 13- 32.
3. Heath, D. A. (198\) Journal of the Royal College of Physicians of London, 15, 197.
4. Kripalani, S., Lefevre, F., Phillips, C.O., Williams, M.V., Basaviah, P. and Baker, D.W. (2007). "Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care", Journal of the American Medical Association, Vol. 297 No. 8, pp. 831-841.
5. Parliamentary and Health Service Ombudsman (2010). Listening and Learning: the Ombudsman's Review of Complaint Handling by the NHS in England 2009-10. London: Stationery Office
6. Pirkle CM, Dumont A, Zunzunegui MV. (2012).. Int J Qual Medical recordkeeping, essential but overlooked aspect of quality of care in resource-limited settings Health Care.;24 (6): 564-567.
7. Hutcheon, A. W. and Wilson, G. M. (1976). Health Bulletin (Edinburgh), 34, 221.
8. Tabrizi JS, Gharibi F, Wilson AJ. (2011). Advantages and Disadvantages of Health Care Accreditation Mod-els. Health Promot Perspect. 1(1):1-31. Published 2011 Jul 25.

Benefits of Publishing with EScientific Publishers:

❖   Swift Peer Review

❖   Freely accessible online immediately upon publication

❖   Global archiving of articles

❖   Authors Retain Copyrights

❖   Visibility through different online platforms

 Submit your Paper at:

https://escientificpublishers.com/submission