



## Evaluation of the quality of nursing documentation through the review of patient medical records\*

*Avaliação da qualidade dos registros de enfermagem no prontuário por meio da auditoria*

*Evaluación de la calidad de los registros de enfermería en la historia clínica por medio de la auditoría*

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### ABSTRACT

**Objective:** To evaluate the quality of nursing documentation on medical records of patients from a university hospital in São Paulo, Brazil. **Methods:** A retrospective descriptive study was used to conduct the study. Four hundred and twenty four medical records of patients from medical and surgical units were reviewed from November 2006 to January 2007. The medical records were from patients who have been discharged from the hospital (56.1%) or those who have expired (43.9%). The focus of the review was on the demographic and background information, operation room flow sheet, nursing progress notes, nursing diagnoses, nursing orders, implementation of the nursing orders, medical orders, nursing documentation, discharge documentation, and documentation of death. **Results:** The majority of nursing documentation was acceptable (64.7%). Only 8.7% of nursing documentation was of good quality. The remainder of nursing documentation was poor (26.7%). It is important to note that was difficult to measure nursing care outcomes reflected in nursing documentation on the medical records. This may affect patient safety and quality care. **Conclusion:** The findings of this study suggested deviation from recommended standards of nursing practice. They served to propose new goals and strategies to improve nursing documentation and the delivery of nursing care. **Keywords:** Quality of health care; Quality assurance health care; Nursing audit; Information management

### RESUMO

**Objetivo:** Desse modo o objetivo deste estudo foi avaliar por meio da auditoria, a qualidade dos registros de enfermagem nos prontuários de pacientes atendidos em unidades de um hospital universitário do município de São Paulo. **Métodos:** O estudo é descritivo, retrospectivo e o método foi pesquisa documental. Dos 424 prontuários analisados entre novembro de 2006 a janeiro de 2007, em diferentes unidades clínicas e cirúrgicas de um hospital universitário, 43,9% se referiam a óbitos e 56,1% a altas. Verificaram-se os itens: Preenchimento do levantamento de dados; Folha de centro cirúrgico; Evolução de enfermagem; Diagnóstico de enfermagem; Prescrição de enfermagem; Checagem da prescrição de enfermagem; Checagem da prescrição médica; Anotação de enfermagem; Anotação de alta hospitalar e Anotação de óbito. **Resultados:** Na análise qualitativa dos prontuários 26,7% foram considerados ruins; 64,6% regulares e 8,7% bons. Observa-se um comprometimento da segurança e da perspectiva de cuidado do paciente, além da dificuldade para mensurar os resultados assistenciais advindos da prática da equipe de enfermagem. **Conclusão:** Essa pesquisa possibilitou apontar vários desvios que foram analisados junto à Diretoria de Enfermagem e com os Grupos de Melhoria de Processos da Diretoria de Enfermagem do hospital em estudo, propiciando propostas de novas metas e estratégias para melhoria da qualidade da assistência de enfermagem, bem como do registro dessa assistência. **Descritores:** Qualidade da assistência à saúde; Garantia da qualidade dos cuidados de saúde, Auditoria de Enfermagem; Gerenciamento de informação

### RESUMEN

**Objetivo:** El objetivo del presente estudio fue evaluar por medio de la auditoría, la calidad de los registros de enfermería en las historias clínicas de pacientes atendidos en unidades de un hospital universitario del municipio de Sao Paulo. **Métodos:** se trata de un estudio descriptivo, retrospectivo cuyo método fue la investigación documental. De las 424 historias clínicas analizadas entre noviembre del 2006 a enero del 2007, en diferentes unidades clínicas y quirúrgicas de un hospital universitario, el 43,9% se referían a óbitos y 56,1% a altas. Se verificaron los items: Llenado del levantamiento de datos; Hoja del centro quirúrgico; Evolución de enfermería; Diagnóstico de enfermería; Prescripción de enfermería; Chequeo de la prescripción de enfermería; Chequeo de la prescripción médica; Notas de enfermería; Notas del alta hospitalaria y Notas de óbito. **Resultados:** En el análisis cualitativo de las historias clínicas el 26,7% fueron considerados como malos; el 64,6% regulares y el 8,7% buenos. Se observa un compromiso de la seguridad y de la perspectiva del cuidado del paciente, además de la dificultad para medir los resultados asistenciales procedentes de la práctica del equipo de enfermería. **Conclusión:** La investigación permitió identificar varios desvíos que fueron analizados con el Departamento de Enfermería y con los Grupos de Mejoría de los Procesos del Departamento de Enfermería del hospital en estudio, propiciando propuestas de nuevas metas y estrategias para mejoría de la calidad de la asistencia de enfermería, así como del registro de esa asistencia. **Descritores:** Calidad de la atención de salud; Garantía de la calidad de atención de salud; Auditoria de enfermería; Gerencia de la información

\*The study was conducted in a university hospital, located in São Paulo, linked to aspects of teaching, research and assistance to a University.

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## INTRODUCTION

The audit is the tool to control the quality of the work of the nursing team and is used with the objective of improving quality of provided services.

There is a positive correlation between the records and quality of care. Thus, one can evaluate the nursing care by means of records, which reflect the quality of nursing care<sup>(1)</sup>.

The auditing is a system of review and control, to inform the administration on the efficiency and effectiveness in program development. Its function is not only indicate the shortcomings and problems, but also pointing suggestions and solutions, is thus a highly educational character<sup>(2)</sup>.

It is defined as the official examination of records of nursing to evaluate, monitor and improve nursing care<sup>(3)</sup> and as a method to evaluate the quality of nursing care through the nursing records, after discharge of the patient<sup>(4)</sup>.

The auditing also can be understood as a systematic evaluation of nursing care, monitored through the notes in the nursing and medical records of patients conditions<sup>(5)</sup>.

There are two types of auditing: a retrospective and operational or recurrent<sup>(1,6)</sup>. The auditing review is made after discharge of the patient and uses the medical records for evaluation. The operational auditing is applied as the patient is hospitalized or in outpatient care.

The auditing can be classified as a form of assistance (internal and external), time (continuous and periodic), the nature (regular and special) and the limit (total and partial<sup>(7-8)</sup>).

The quality of nursing includes not only the training of nurses, the process of restoring the health of the client or, where this is not possible, improvement of living conditions, the guidelines on the self, the simplification and safety procedures in nursing, but also the result of the hospital, as measured by the quality of documentation and registration of all shares of nursing. That is, the quality of care record reflects the quality of care and productivity. And, based on these records, you can always build best practice care, and implement actions aimed to improvements in operating results<sup>(9)</sup>.

The annotation is one of the most important communication from the nursing, taking into account that has a purpose: to establish an effective communication between nursing staff and other professionals involved in caring for human beings; the basis for the preparation of the plan care to the patient, a source of data for the evaluation of the assistance; used to monitor the patient, constitute legal document for both the patient and for the nursing team regarding the care, contribute to the audit of nursing and work

for teaching and research in nursing<sup>(10)</sup>.

It is in the patient's medical records that information is written to reflect the care and treatment provided during hospitalization. The development, reactions and concerns of the patient should be recorded, using terms that explain the facts clearly. The nursing staff should provide the time to make the notes in the records of each patient, as part of the legal responsibilities of nursing<sup>(11)</sup>.

The control is done through four distinct phases: establishment of standards of performance, measurement of performance to be controlled, comparison of current performance with the pattern and take corrective action to adjust the current performance to desired standard<sup>(12)</sup>.

The records in the patient's medical chart, made by the nursing staff should reflect the conditions bio-psycho-socio-spiritual, where all occurrences are reported to have relationship with this patient, enabling the development of a plan and continuity of care<sup>(13)</sup>.

The nursing notes value as a source for researches, an instrument of education and legal document. Thus, the records may serve as a means of evaluation of nursing care provided to patients and the quality of annotations made by the nursing staff<sup>(14)</sup>.

The understanding of a text may be hampered by poorly constructed sentences, the use of words that can generate multiple senses or the use of terms of a very specific area of knowledge<sup>(15)</sup>. The nursing record is a document, i.e. the representation of a fact or an act, may be written or graphic, and therefore should be recorded clearly, expressing all the actions undertaken in the care provided to patients<sup>(16)</sup>.

Despite the above considerations about the importance of legal and welfare, often the nursing notes do not contain the necessary information to support the institution and / or nursing in a judicial case<sup>(17)</sup>. The records in the patient's medical records are of great importance, but almost disregard for this type of formal written work and the lack of notes in medical records of patients often hinders the exercise of protection of the rights of nursing professionals, either judicially or administratively<sup>(10)</sup>. Thus the aim of this study was to evaluate through the auditing, the quality of nursing records in the charts of patients treated in units of a university hospital of São Paulo.

### Theoretical reference

The study was based on research developed by the authors who worked with the auditing of nursing and quality of care as Kurcgant, Chiavenato, Deeken, Phaneuf, Pereira and Takahashi, Souza, Fonseca, D'Innocenzo and Adami, Labbadia and Adami.

## METHODS

The study is descriptive and retrospective.

The desire to know the object of study in question is the key focus of the descriptive study. This type of study aims to describe, accurately, the facts and phenomena of a certain reality. Thus, the researcher requires a range of information on what you want to search<sup>(18)</sup>.

The method of data collection, one of the paths used for this study was the analysis and documentary research. By documentary research means the examination of materials of various kinds, which have not yet received an analytical treatment, or which may be reviewed, looking up new forms and / or complementary interpretations<sup>(10,19-20)</sup>.

In this study, documentary analysis was performed by the analysis of records of patients.

### Field of study

The study was conducted in a university hospital, located in São Paulo, linked to aspects of teaching, research and assistance to a University.

It's a large hospital, which has units of hospital, outpatient, intensive care, obstetric center, surgical center, nursery, emergency room, complete structure for conventional diagnosis and intervention, and deal with highly complex medical procedures.

### Criteria for assessment and analysis of records

The items were evaluated in the chart: Completion of survey data; Sheet of surgical center; Sheet of cost of the surgical center, nursing developments, nursing diagnosis, prescription of nursing; check the prescription of nursing; check the prescription; Annotation of nursing; Annotation of hospital and annotation of death.

The criterion for evaluation were prepared for the auditing of records at the hospital in question and refer to their readability, clarity and completeness.

With respect to the items assessed, we used the following criteria to score them: excellent (4 points): when achieved from 90% to 100% of the evaluation criteria, good (3 points): when achieved from 70% to 89% of criteria for evaluation, regular (2 points): when achieved from 50% to 69% of the evaluation criteria; bad (1 point): when included equal or less than 49% of the evaluation criteria, absent (0 points): when was deployed but was not done. The term shall not apply, was used only when the item was evaluated in a deployed unit, but their assessment was not relevant to the records in question, for example in case of no prescription nursing is not possible to have the assessment of the check prescription, and the item was not used up when the item was not assessed in the unit deployed to date in the diary was evaluated, for example: the evolution of nursing in the

unit was deployed in November and the medical records was assessed in October.

Regarding the qualitative analysis of the chart, the following criterion was established: Great, when all requirements were checked thoroughly, stamps and signatures on all notes and changes in nursing; comprehensive annotations (during the admission, discharge or death), intelligible and following the guidelines of the protocol, presence of systematization of nursing care (SAE) and filled completely with the guidelines. Well, when most of the prescriptions were checked properly, and full use of signature stamp in the notes and changes in nursing; comprehensive annotations (hospitalization, complications, discharge or death), following the guidelines of the protocol; SAE incomplete or filled so inadequate. Regular when part of the requirements was not checked, and no incomplete signature stamp most of the notes and changes in nursing; incomplete annotations (hospitalization, complications, discharge or death) following the guidelines part of the protocol, lack of survey data in the chart, there are prescription only and evolution of nursing. Bad when most of the requirements was not checked, no signature and stamp on most of the nursing notes and developments; missing notes of complications, discharge or death, absence or inadequacy of the evolution of nursing, lack of survey data in medical.

### Sample of the study and period

A number of 424 charts were reviewed in a period of data collection occurred during the months of November and December 2006 and January 2007.

The charts were selected according to the following criteria: all records output by death, available in the Archive Service and Medical Statistics (SAME) in the corresponding months, and a sample of records for high output of each unit and department of nursing, available at the SAME in the same period.

### Ethics in research

The research project was approved by the Research Ethics Committee of the Institution.

## RESULTS

To audit the patients' records we chose the internal audit review, characterized by analysis of the relationship between the criteria established and the data found in the review of medical records, after the output (high or deaths) of patients.

We evaluated a total of 424 charts of patients admitted in various units of the hospital, 185 of them were patients that used more than one service, nursing, or have been hospitalized and used the services of more

than one unit and is therefore considered and counted in each of the units in which they were. Thus, 61 were from the medical clinic, 106 of the surgical clinic, 70 of medical surgical clinic, 129 of the emergency, 92 of the pediatric and obstetrics clinics, 21 of anesthetics, 17 of agreements and 139 of the surgery center.

Regarding item survey data, this was present in 13.4% of charts, missing in 27.8%, not implanted in 58.3% and does not apply in 0.5% of the charts, because they refer to organ donor patients. Only 22.8% were considered complete.

Records of the item considered complete survey data, 50.9% were from clinical medical - surgical, 21.0% of clinical surgery, 26.3% of the medical clinic and 1.8% did not identify the clinic where he had been made.

From evaluated medical records 41% had nursing diagnosis and these were 5.2% complete, 75.2% had a prescription of nursing which 3.5% were complete and 45.8% had completed the development of nursing, these 2.6 % were complete.

With respect to the sheet of surgical center, it was present in 55.6% of records where the leaf was located and absent in 44.4%.

In relation to checking the requirements for nursing, in 70.7% of records were present and of these, only 1% was complete, 4.5% and 24.8% absent this item was not applied (because the requirements were absent) . A check of the prescription was 98.1% in the records of these, 1.7% had a complete check and 1.9% was missing from records.

The nursing notes were present in 99.5% of the records, 2.4% of them were complete. 0.5% of records had no annotations, these were patients who used the services of emergency nursing and clinical surgery.

The high notes were present in 84.4% of records, these were 31.7% complete. Missing medical records, 15.6% and 30.6% belonged to the nursing department of surgical clinics, 20.4% for pediatric clinics, 14.3% of the services of the clinic medical surgical nursing and 14.3% of medical clinic , 10.2% of agreements, to 8.2% in emergency nursing service and 2% were unsure as to the unit where the patient was hospitalized at the time of discharge, between nursing in pediatric clinical or in clinical surgery.

The notes of death in 82.7% of records, had 9.9% of full annotations. 17.3% of records in which the notes were missing, 36.8% belonged to the nursing service in emergency, 15.8% of nursing services in clinical surgery and anesthesia in 15.8%, 10.5% to nursing services in the surgery room and 10.5% in general medical surgery, 5.3% of nursing services in general medicine and 5.3% had a doubt about the unit where the patient was at the time of death, if the services nursing in anesthesia or surgery center.

In qualitative analysis of records 26.7% were considered poor, 64.6% were regular and 8.7% good. No files were evaluated as excellent.

In general, the problems encountered in the medical records of nursing were: development of nursing notes and indistinct as to content or, similar to medical developments, including pipelines and prescriptions. It also failed to unreadability, misspellings, incorrect use of terminology and acronyms not standardized and without reference to some of the local records, as well as failures in identifying the training, either by lack of stamp or name illegible. Often, it was observed that the explanation of high or death were no clear and that there were gaps in the annotation, for non-completion of any item of prescription and administration of medicines, or nursing, or by pointing the time schedule without presenting the reasons of not achieving as well as by not checking.

## DISCUSSION

These data are similar to results found in a search<sup>(21)</sup> where the authors observed that the annotations, while on the appropriate form, proved to be incomplete in relation to content analysis, as they were completed ranged from 13.4% to 26.8%. The formal identification of the executors of activities has also not in conformity with the legal requirement of COFEN<sup>(22)</sup>. Regarding drug therapy, there was high percentage (70.1%) of no records with reasons to support for not administrate prescribed medications<sup>(21)</sup>.

In a conducted study in six hospitals and teaching universities it was observed, in four of these units, that the annotations in the nursing records were incomplete, which made these documents fragile in question, for the quality assessment care process, both as in ethical and legal aspects<sup>(23)</sup>.

## CONCLUSION

The record in the patient's medical records provides assistance to cover various aspects and support ethical and legally for the responsible assistance professional and the patient. When this record is sparse and inadequate compromises the care provided to patients and the institution and the nursing staff. There is a commitment from the perspective of safety and care of the patient, besides the difficulty to measure the outcomes resulting from care practices of nurses.

The standardization of the nursing records (notes and developments) are needed, since there are flaws with regard to adequacy of formal language, grammar, accuracy, brevity, clarity, identification and technical terminology.

The auditing is crucial to detect the problems presented in the charts, it allows through the assessment reports, guidance to the team and the institution, as appropriate to the record of professional actions and support ethical and legal, in relation to Counselors, Class associations and justice.

The research in question has an analysis of the results

of the audit of nursing records, which has several deviations that point were analyzed with the Directors of Nursing and with the Process Improvement Group of the Board of Nursing of the hospital under study, providing proposals for new targets and strategies for improving the quality of nursing care, and the record of their assistance.

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