

Quality indicators of the nursing process documentation in clinical practice

Indicadores de qualidade da documentação do processo de enfermagem na prática clínica
Indicadores de documentación de calidad del proceso de enfermería en la práctica clínica

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ABSTRACT

Objectives: to propose quality indicators for clinical nursing documentation **Methods:** methodological study in which literature review guided the composition of an instrument for evaluating nursing documentation. Two independent professionals evaluated 204 medical records of adult patients. The analysis of this assessment generated quality indicators for clinical nursing documentation. Inter-rater agreement was analyzed by Cohen's kappa. **Results:** the bibliographic review, analysis by experts and pre-test resulted in 88 evaluation items distributed in seven topics; in 88.5% of the items, inter-rater agreement between strong and almost perfect ($k=0.61-1.0$) was observed. Analysis of the evaluations generated a global indicator and seven partial indicators of documentation quality. Compliance in the two services ranged between 62.3% and 93.4%. The global indicator showed a 2.1% difference between services. **Conclusions:** seven quality indicators of clinical nursing documentation and their method of application in hospital records have been proposed.

Descriptors: Quality Indicators, Health Care; Documentation; Nursing Process; Nursing Records; Nursing Methodology Research.

RESUMO

Objetivos: propor indicadores de qualidade da documentação clínica de enfermagem. **Métodos:** estudo metodológico em que revisão da literatura norteou a composição de um instrumento de avaliação da documentação de enfermagem. Dois profissionais independentes avaliaram 204 prontuários de pacientes adultos. A análise dessa avaliação gerou indicadores de qualidade da documentação clínica de enfermagem. A concordância interavaliadores foi analisada pelo kappa de Cohen. **Resultados:** a revisão bibliográfica, análise pelos especialistas e pré-teste originaram 88 itens de avaliação distribuídos em sete tópicos; em 88,5% dos itens, observou-se concordância interavaliadores entre forte e quase perfeita ($k=0,61-1,0$). Análises das avaliações geraram um indicador global e sete indicadores parciais de qualidade da documentação. A conformidade nos dois serviços variou entre 62,3% e 93,4%. O indicador global mostrou diferença de 2,1% entre os serviços. **Conclusões:** foram propostos sete indicadores de qualidade da documentação clínica de enfermagem e seu método de aplicação em prontuários hospitalares.

Descritores: Indicadores de Qualidade em Assistência à Saúde; Documentação; Processos de Enfermagem; Registros de Enfermagem; Pesquisa Metodológica em Enfermagem.

RESUMEN

Objetivos: proponer indicadores de calidad de la documentación clínica de enfermería. **Métodos:** estudio metodológico en que revisión de literatura orientó la composición de instrumento de evaluación de la documentación de enfermería. Dos profesionales independientes evaluaron 204 prontuarios de pacientes adultos. Análisis de esa evaluación generó indicadores de calidad de la documentación de enfermería. La concordancia interevaluadores fue analizada por Kappa de Cohen. **Resultados:** revisión bibliográfica, análisis por especialistas y pretest originaron 88 ítems de evaluación distribuidos en siete tópicos; en 88,5% de los ítems, observó concordancia interevaluadores entre fuerte y casi perfecta ($k=0,61-1,0$). Análisis de las evaluaciones generaron un indicador global y siete indicadores parciales de calidad de la documentación. La conformidad en los dos servicios varió entre 62,3% y 93,4%. Indicador global mostró diferencia de 2,1% entre los servicios. **Conclusiones:** fueron propuestos siete indicadores de calidad de la documentación de enfermería y su método de aplicación en prontuarios hospitalarios.

Descriptorios: Indicadores de Calidad de la Atención de Salud; Documentación; Procesos de Enfermería; Registros de Enfermería; Investigación Metodológica em Enfermería.

INTRODUCTION

The evolution of the care process with the use of the Nursing Process (NP) in different scenarios in the world culminated with the advent of the standardization of nursing languages for diagnoses, interventions, and results, by international entities such as: NANDA International Nursing Diagnosis (NANDA-I)⁽¹⁾; Nursing Intervention Classification (NIC)⁽²⁾ and Nursing Outcomes Classification (NOC)⁽³⁾, among others. This promoted changes in the NP and updated the concepts involved⁽⁴⁾, today comprising the phases: nursing assessment; nursing diagnosis; nursing orders; progress notes; and nursing-sensitive patient outcomes⁽⁵⁾.

Garcia⁽⁶⁾ identifies the NP as the “founding and structuring axis” of the systematization of nursing care. Its various phases are recorded on forms that integrate the patient health record, and these records serve different purposes: to support the professional ethically and legally, to express the assistance provided, to qualitatively estimate the work performed by nursing⁽⁷⁾; monitor the quality of care, establish a structured communication between health professionals; guarantee the continuity of individualized care and define the focus of nursing care^(5,8); or even help explain the length of hospital stay and hospital costs⁽⁷⁾.

Adequate documentation must contain five main elements: personal information of the patient with description of the admission data taken in the interview; complete nursing diagnoses; planned and implemented interventions; recording of outcomes; be precise, complete, and readable^(5,9). To evaluate the quality of NP documentation and ensure comparability of evaluations, tools are needed to assess the records of its various phases.

Low quality nursing records can point out serious problems, directly impacting the quality of care and patient safety, involving not only professionals in care practice, but also managers, professional bodies, researchers and teachers⁽¹⁰⁾.

One way to obtain more reliable records is to use instruments that evaluate their content and clearly identify the weak points. This identification can be achieved using indicators. The use of quality indicators that describe the type of expected performance allows quantifying results and planning actions based on evidence from valid and reliable data⁽¹¹⁾. An indicator is “a specific quantifiable aspect of a result or process”⁽¹²⁾, a measure that reflects a given situation⁽¹³⁾, which can be used to support actions that promote improvement in nursing documentation.

An indicator that evaluates the existing nursing records in the patient health record can guide nurses to document care activities in accordance with international good practices and national regulations for clinical documentation⁽⁵⁾. The understanding that the documentation “promotes effective communication between caregivers, facilitating the continuity and individuality of care”⁽⁸⁾ motivated the realization of this study. Although there are hundreds of indicators in use in health and nursing, an initial literature review found an absence of quality indicators of the clinical nursing documentation maintained in the patient health record, concerning the stages of the NP. The study culminated in the development of quality indicators that enable a detailed analysis of clinical nursing documentation in patient health records.

OBJECTIVES

To propose quality indicators for clinical nursing documentation.

METHODS

Ethical aspects

The project was approved by the Research Ethics Committee (REC) of the School of Nursing at the University of São Paulo (EUSP) before the participation of specialists and collection in medical records. The waiver of signing the Free and Informed Consent Form was granted because it is documentary research conducted after the patients were discharged. The Confidentiality Term was signed by everyone who handled the medical records, making the commitment to confidentiality official

Study design, period, and location

This is a methodological study that adopted the scale elaboration procedures proposed by Pasquali⁽¹⁴⁾, organized in three poles (theoretical, empirical and analytical), and the structure of the phases of the Nursing Process, for the development of a set of indicators of the quality of the nursing documentation found in the patient’s medical record. Methodological studies are used when trying to deal with the development of new research instruments and methods⁽¹⁵⁾. This work, comprising the theoretical, empirical and analytical poles, was carried out between February 2014 and December 2019.

The Clinical Nursing Documentation Evaluation Tool (ClINDET) test was conducted at two hospitals located in the city of São Paulo: a private, medium-sized one, where all stages of the NP had been in place for about three years, which offered assistance to insured patients; the other, a large public hospital, where the NP had been implanted for over 30 years.

Sample

204 patient health records of adult patients hospitalized in 2013, with a hospital stay of four days or more, were used, so that it was possible to analyze the nursing records of three dates of the hospitalization period: entry; central to the hospitalization period; and leaving the care system. All nursing records at the private institution were digitized; and, in the public, the notes and developments were handwritten. In both, the medical records were on paper.

Study protocol

Theoretical Stage

The following were adopted: the nursing process⁽¹⁶⁾ as the reservoir of theoretical principles for defining the attributes of clinical nursing records contained in the medical record⁽⁵⁾; and the Classic Test Theory⁽¹⁴⁾, for having as one of its central principles the concern in verifying whether a given object has a group of predefined target characteristics⁽¹⁷⁾.

Three procedures were performed in the theoretical phase: item generation, content analysis and semantic analysis⁽⁵⁾.

The *generation of items* occurred based on a literature review that identified the characteristics of the documentation to be evaluated. The search was carried out in the information bases PubMed, CINAHL, Cochrane, Ovid and SciELO with the keywords: documentation, nursing processes, nursing records, indicators, and results measures. The material collected was analyzed by the researchers independently, unifying content considered redundant and establishing categories or concepts capable of gathering characteristics of the record⁽⁵⁾. Each unique and observable characteristic of the record was considered to constitute an item for evaluating the documentation⁽¹⁴⁾; and the concepts/categories that added several items were called content topics.

After the delimitation phase of the items and content topics, the conceptual and operational definitions of the content topics were elaborated. *Conceptual definition* is understood as one that is built on the basis of other concepts, in terms of abstract realities; *operational definition* is "one that describes in quantifiable terms what you want to measure and establishes the steps to be taken to obtain the measure"⁽¹²⁾. The conceptual definitions of the NP phases were developed with support from the specialized literature; and operational ones, with documents from professional nursing entities in Brazil and abroad. The other topics had their definitions elaborated according to the professional meaning or application of the terms.

The *content analysis* was based on the opinion of experts who established the relevance of the content topics and items^(14,17). Previous studies suggest groups of 3 to 12 professionals for this analysis⁽⁸⁻⁹⁾. The group of specialists was made up of five members (masters and doctors) with an average experience of more than ten years in NP documentation and who had been participating in a group of studies in nursing diagnoses for more than three years, being used to making decisions consensual. The experts initially analyzed the content topics and their conceptual and operational definitions in relation to their relevance (adequacy to the theoretical principles of the NP) and clarity (the possibility for an evaluator to judge whether the records present elements of the topic in question). Then, the pertinence, clarity and comprehensiveness of the items were analyzed: pertinence assesses whether the item is consistent with the attribute to be analyzed; clarity checks whether the statement is easy to understand; and the scope verifies the possibility of using the item for the analysis of clinical nursing records in different spaces of practice⁽⁵⁾.

In the *semantic analysis*, the focus was on the adequacy of the wording of the content topics and the items in terms of clarity and elegance⁽⁵⁾. In this phase, the same specialists sought to ensure the items' intelligibility or understanding⁽¹⁴⁾. The suggested changes in the wording and the inclusion of new items were discussed and incorporated when there was consensus, ensuring the apparent validity of the set of topics and items^(14,17).

After finishing the work with the specialists, eight students graduating from the undergraduate course in nursing and two newly graduated nurses (less skilled strata), without exchanging information, expressed their opinion on the ease of understanding and coverage of the items⁽¹⁷⁾; this group did not suggest modifications.

The content topics and respective items, developed in the previous steps, originated a printed instrument to collect data

from the clinical nursing documentation of medical records of hospitalized patients, called "Clinical Nursing Documentation Evaluation Tool (CliNDET)", composed of seven topics of content: nursing assessment, nursing diagnoses, nursing prescription, nursing evolution, nursing notes, patient identification and general characteristics of the record⁽⁵⁾.

Empirical stage

In order to test the reliability of the instrument, peer evaluation was used as a data collection strategy. Each record, selected randomly, was analyzed by two nurses independently, considering the records of three different moments of the hospitalization period: date of entry into the system, central date of the period of stay in the institution and date of departure. The evaluators verified the presence and compliance of the registry with the criteria defined in each item of the CliNDET, which could be assessed as: absent (0 points); partial or incomplete (1 point); complete (2 points); not applicable (NA). Each result was noted in the corresponding field, next to the respective item⁽⁵⁾.

The empirical stage started with a pre-test, with the CliNDET being used in the evaluation of ten records selected at random by two nurses who acted independently. As a result, on five of the seven content topics, the identification items of the executor of the registry were redistributed. These topics were reordered considering the sequence of the NP phases and fields were inserted to annotate the observations referring to the three moments of the record on the same sheet, in order to facilitate the collection and tabulation of the data (Chart 1). Pre-test data was not included in the final results.

After the adjustments resulting from the pre-test, 204 medical records were analyzed by the same nurses, considering the three defined moments: entry, middle and exit from the care system.

Analysis of results and statistics

The analytical step used Cohen's kappa and the 95% confidence interval (95% CI) to estimate inter-rater reliability; the percentage of compliance was used to analyze the compliance of the records with the criteria of the indicators. This analysis represents the consistency of performance or the degree of agreement in the score attributed by different evaluators to the same object. A reliable instrument will result in measurements that are very close or equal when applied to the same situation at different times or by different evaluators^(5,18). The kappa value equal to 1.00 represents the highest possible agreement between evaluators⁽¹⁷⁾. As the two evaluators analyzed the same medical records, the expected was high levels of peer agreement.

The set of quality indicators for clinical nursing documentation derived from the data obtained with the CliNDET and from the theoretical procedures involved in its development. The proposed indicators were applied to data from the two study sites as an example.

As there are no specific guidelines for reporting instrument development studies, this report was, whenever relevant, guided by the Guidelines for Reporting Reliability and Agreement Studies (GRRAS)⁽¹⁹⁾.

RESULTS

The results presented represent part of the studies developed in the doctoral program in adult health (PROESA) of the School of Nursing at the University of São Paulo⁽⁵⁾.

Generation of items - The review listed 316 concepts and characteristics potentially relevant for the evaluation of clinical nursing documentation. An analysis carried out independently by the authors defined which ones would apply to the context of documentary analysis and which would not. This analysis resulted in the exclusion of 191 items, the majority due to duplicity, remaining 125 (39.6%). In this phase, two groups of record attributes emerged: content topics and items. Content topics: concepts that add several characteristics of the registry. Items: descriptions of specific characteristics of the clinical documentation.

Content analysis – The proposed conceptual and operational definitions were analyzed by the expert committee, which, upon completion of the work, maintained eight topics with their revised conceptual and operational definitions, complemented and approved by consensus. The exclusion of content topics resulted in the relocation and removal of items, reducing them to 74.

Semantic analysis – This analysis resulted in: changing the title of the topic “Record characteristics” to “General record characteristics”; inclusion of items; wording adequacy of items; improving the clarity of the terms used; exclusion of two items - one on the topic RC (Item: the record has clear language) and the other on the topic PI (Item: the nursing documentation allows to identify which patient the information refers to), as it understands that they repeated information already addressed. The product obtained originated the first version of the Clinical Nursing Documentation Evaluation Tool - ClinDET, which was evaluated by eight undergraduate students and two newly graduated nurses, representing the least skilled stratum of the target population, which did not suggest changes.

Clinical Nursing Documentation Evaluation Tool

The review process carried out by the experts and the pre-test modified the items and topics initially suggested. In the first presentation to specialists, the instrument had 74 items. The content/ semantics analysis work resulted in 81 items. The instrument, then with 81 items, was submitted to the pre-test, after which it started to count with 88 items due to changes including items of identification of the professional in the topics documented in separate forms: nursing assessment, diagnoses, prescriptions, evolutions, and annotations. A model of a topic is shown to the reader, in Chart 1, which shows the topic title, the evaluation items, the scores and the place to record the assessments. The shaded area indicates that, for these items, no non-applicability condition is foreseen.

In order to guide the registration of the documentation evaluation, CliNDET usage guidelines were created, seeking to reduce possible inconsistencies arising from the interpretation of the item or from the way of writing down the answer; they also served to guide the concepts involved in the analysis of the documentation. Each item was analyzed in terms of the possibilities of registration; and it was also indicated how to score the assessment in each situation, as seen in the model, in Chart 2, which presents only one item of the topic. Each of the 88 items has guidelines to guide the evaluation of records.

Chart 1 – Clinical Nursing Documentation Evaluation Tool — section corresponding to the topic Patient Identification

Content topic: Patient Identification (PI)		Input				Middle				Exit			
Evaluation items		0	1	2	NA	0	1	2	NA	0	1	2	NA
PI1	The nursing documentation informs the patient's full name.												
PI2	The nursing documentation informs the patient's date of birth or age.												
PI3	The nursing documentation informs the patient's sex.												
PI4	The nursing documentation informs the patient's unique registration number for the care system.												

Note: Input – date of entry into the care system; Middle – central date of the hospitalization period; Exit – date of exit from the care system; NA – Not applicable.

The CliNDET was applied by two independent evaluators who evaluated 204 patient health records, 101 in hospital A and 103 in B. From each patient health record, the records of three dates were evaluated, namely: that of entering the care system, that of half of the period of stay and exit from the system, corresponding to the nursing documentation of 612 days of hospitalization. The patient health records analyzed were those of patients admitted to adult inpatient units; of these, 62.7% were women; the general average age was 56.2 years; 64.7% were for clinical treatments; and the average length of stay in this sample was 10.5 days.

Chart 2 – Guidelines for completing the Clinical Nursing Documentation Evaluation Tool instrument

GUIDELINES FOR COMPLETING THE CliNDET		
Content topic: Nursing Assessment (AE) on patient admission		Guidelines for evaluators
Analysis items		
AE1	The nursing assessment is documented at the appropriate time.	0 - there is no record of the NA; 1 - NA registration was made after the first 24 hours of entry into the care system, or it is not possible to identify when it was done; 2 - NA registration was made within the first 24 hours of entry into the care system.

Note: CliNDET – Clinical Nursing Documentation Evaluation Tool.

The average time spent to evaluate the documentation was 48 minutes per patient record, corresponding to 16 minutes per date of the analyzed nursing documentation.

Table 1 summarizes the data referring to the inter-rater agreement calculated by Cohen's kappa (k), for each content topic of this study. The results are analyzed according to the criteria of interpretation of the k values proposed by Landis and Koch⁽²⁰⁾, which suggest an interpretation according to the values expressed in the table, with an insignificant agreement corresponding to values of k < 0.20 and almost perfect if k ≥ 0.81.

Table 1 shows that, for 88.5% of the items, the inter-rater agreement was strong or almost perfect.

Table 1 – Frequency of degrees of peer agreement according to content topics and time of assessment of clinical nursing documentation, São Paulo, São Paulo, Brazil, 2015

Content Topics **	Time**	Degrees of agreement between Landis and Koch ⁽²⁰⁾					Total
		Almost perfect (0.81-1.00)	Strong (0.61-0.80)	Moderate (0.41-0.60)	Median (0.21-0.40)	Insignificant (0.0-0.20)	
AE	e	15	2	-	-	-	17
PI	e	4	-	-	-	-	4
	m	1	3	-	-	-	4
	s	2	2	-	-	-	4
ND	e	7	3	2	-	-	12
	m	11	1	-	-	-	12
	s	11	1	-	-	-	12
NO	e	9	3	1	1	-	14
	m	7	7	-	-	-	14
	s	10	3	1	-	-	14
PN	e	13	-	-	-	-	13
	m	10	2	1	-	-	13
	s	10	2	1	-	-	13
GC	e	5	1	1	2	-	9
	m	5	-	3	1	-	9
	s	6	1	2	-	-	9
NN	e	2	4	2	1	-	9
	m	2	3	3	-	-	8
	s	10	6	2	-	-	18
Total	n	140	44	19	5	-	208
	%	67.3	21.2	9.1	2.4	-	100.0

Note: * Content topics: AE - Nursing assessment; PI - Patient identification; ND - Nursing diagnoses; NO - Nursing orders; PN - Progress notes; GC - General characteristics of the registry; NN - Nursing notes; ** e - entry; m - middle; s - exit.

The use of the CliNDET tested its applicability and verified the results in a real situation of evaluation of the documentation for which it was created, seeking to identify similarities and differences in the nursing records in two institutions with different characteristics.

Each content topic was considered an indicator composed of its respective items that are now called "criteria". Therefore, we obtained seven partial indicators of quality of clinical documentation, among which 88 criteria are distributed.

An indicator of the quality of clinical documentation expresses the degree of compliance of the documentation with the corresponding criteria. For the calculation of the indicators, it is necessary to consider the number of days on which each criterion is scored in the CliNDET. The maximum score depends on the number of days on which its criteria can be assessed.

The maximum score established for each criterion was 2 points, and each indicator must be applied between one day (Nursing Assessment) and up to three days (the other indicators). The possibility of the occurrence of non-applicable criteria has implications for the calculation of the indicators. If there are "not applicable" criteria, the maximum scores will be affected by subtracting 2 points for each non-applicable criterion. To allow comparisons and facilitate interpretations, the degree of compliance with what is observed with the corresponding indicator must be calculated in terms of proportion, so that the "not applicable" criteria do not distort the calculated values. Shaded cells (Chart 1) and without a value represent no punctuation to be assigned or computed.

The relevant definitions for the quality indicators of clinical nursing documentation are: the global quality indicator of clinical nursing documentation (QICD_{global}) represents the degree of compliance of clinical nursing records with recommended criteria, by regulatory bodies of practice and by national and international specialized literature, such as good practices of the clinical record

in the patient's medical record. It is expressed as a percentage, corresponding to the average of the partial quality indicators of clinical nursing documentation.

The formula for calculating the global quality indicator of clinical nursing documentation (QICD_{global}) are:

$$QICD_{Global} = [(QICDAE + QICDPI + QICDND + QICDNO + QICDPN + QICDGC + QICDNN) : 7] \times 100$$

General formula for calculating partial quality indicators of clinical documentation:

$$QICD_{Parcial} = [B / ((D \times C) - (A \times 2))] \times 100$$

A – number of criteria with evaluation does not apply (N / A); B – sum of the points obtained in the applicable criteria; C – Total medical records analyzed; D – total points attributable to the content topic of interest (AE, PI, ND, NO, PN, GC, NN).

Table 2 – Global quality indicator of clinical nursing documentation (QICD_{global}) score calculated for the set of indicators in this study, São Paulo, Brazil, 2019

Indicator	Institution A	Institution B
Nursing assessment - QICD-AE	82.40	73.74
Patient identification - QICD-PI	87.71	84.23
Nursing diagnoses - QICD-ND	62.33	74.97
Nursing orders - QICD-NO	75.31	80.10
Progress notes - QICD-PN	79.95	82.03
General characteristics of the registry - QICD-GC	93.48	72.18
Nursing notes - QICD-NN	76.99	76.09
QICD-Global	79.74	77.62

Note: QICD – quality indicators of clinical nursing documentation.

The results summarized in Table 2 show that the global QICDs of the two institutions were very close, although the degrees of compliance in both institutions varied substantially according to the criteria of each indicator and partial QICDs.

DISCUSSION

This study was conducted with the aim of developing an indicator (a measure) to assess the quality of clinical nursing documentation filed in medical records⁽²¹⁻²³⁾; and with support from the specialized literature^(16,24-25).

In nursing, indicators have been used to monitor care, indicate flaws in the work processes, assessment and improvement of care⁽²⁶⁾ in describing a problem, in assessing changes and trends⁽²⁷⁾ or, still, to promote patient safety⁽²⁸⁾.

Developing documentation indicators shareable between sectors and types of care facilitates the monitoring of the services' compliance with the formal documentation requirements of the NP⁽²⁹⁾, the documentation of nursing care being fundamental for facilitating interprofessional communication⁽⁷⁻⁸⁾.

The use of measurement instruments and indicators depends on the ease of their application⁽¹²⁾, the expected administrative burden and the ease of understanding and interpretation by specialists⁽³⁰⁾. With 88 items, the CliNDET can be considered a long instrument, even though it is divided into seven topics.

After application, possibilities for reducing the items were identified, as in the case of the four professional identification items, which can be reduced to two: one on the signature and the other on the professional stamp, since Resolution COFEN 0545/2017⁽³¹⁾ establishes mandatory use of the stamp, which must contain the full name, professional category, and professional registration number. With this change, 12 items would be removed, leaving 76 (a reduction of 13.6%), which would facilitate the application without reducing the quality of the document analysis.

The evaluation of peer agreement when applying the CliNDET sought to ascertain the levels of similarity of responses between two evaluators, providing evidence on the reliability of the measure⁽¹⁵⁾.

In the summary of the evaluations presented in Table 1, it is observed that, of the 208 investigations carried out - comprising the dates of entry, middle and exit of the system -, in 88.5%, the kappa values showed agreement between strong and almost perfect (0.61 to 1.00). Some criteria achieved low percentages of compliance. These results may have occurred due to the terms used, the description of the criterion or the approach of the records. Consideration should also be given to the possibility of measurement errors arising from: situational contaminants such as time of day, temperature and lighting; personal factors such as hunger, tiredness, interest; administrative issues; hasty decisions⁽¹⁵⁾; and, still, subjectivity of the information to be evaluated, accommodation effect to the observed facts, altering the judgment⁽¹⁸⁾.

Study limitations

The limitations of the study can be considered: three days of hospitalization are required to fully use the CliNDET and the QICDs in order to have a greater number of records, covering the most critical events in the documentation; evaluations by blocks of content covering the phases of the EP do not inform about the exact location where the documentary failures occur; the application of the instruments (CliNDET and QICDs) was performed only in hospital records, where it is more frequent to find all documented phases of NP⁽²⁹⁾.

Contributions to the Area

The results of the study allow to glimpse as possibilities of application of the indicators: directing the training of the nursing team to a more complete record of the actions carried out in the different stages of the NP; conducting research on the activities developed by nursing; greater contribution of resources to the institution by reducing the disallowances made by the audit of the institutions paying the hospital bills. The indicators can also be used as an educational resource in the training of nursing students for the records related to the NP.

CONCLUSIONS

The study enabled the development and validation of seven quality indicators of clinical nursing documentation (QICD), formulated to evaluate the records of the stages of the nursing process and two other sets of characteristics of the record documented in the medical record, at different times of hospitalization. Its use was tested through the evaluation of clinical records conducted by estimating the percentages of compliance among the evaluated records, in which more than 70% compliance was found between the documentary records and the criteria of the proposed indicators.

The indicators were proposed based on the Clinical Nursing Documentation Evaluation Tool (CliNDET), validated by specialists through consensus, whose reliability was established by the inter-rater agreement values estimated by Cohen's kappa. Such values showed that 88.5% of the evaluations performed showed agreement between strong and almost perfect, with the *k* values between 0.61 and 1.00, as well as other *k* values between 0.21 and 0.60, which allows to affirm that it is a reliable instrument.

These instruments and methods tested in hospital records can be refined in new tests and guide the development of indicators to assess clinical nursing documentation in other care settings.

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