Role of standardized nursing records in the evaluation of nursing care intensity

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抄録：　今日の医療費の増加の要因については、高齢者の増加や、医療分野が生産性の向上が図られにくい分野であること、そして、医療従事者の確保は、基本的には賃金の上昇しかないという構造的な課題があることが知られている。このことは、サービスを生産する場としての病院の経営において、常に質が高い労働力を維持するために、どのようなガバナンスが必要であるかを検討しなければならないことを意味している。とりわけ、病院の主たる労働力である看護師の質とその人数の確保は、まさに病院経営の要といえる。

さて、現在、日本の診療報酬制度において、この看護師の算定に関する評価指標は、「看護必要度」だけであるが、この評価に際しては、患者のアセスメント情報と看護師が当該患者に提供した医療処置や看護の記録を根拠とすることが義務化されている。すなわち、これは、患者の状態と提供されたケア等が適正か否かを判断できる看護記録の整備が必要となることを意味している。

しかし、これまでの先行研究から看護記録については、記録様式の標準化も進んでおらず、記録時間も確保されていないことが問題として指摘されてきた。

本稿では、看護記録が不備な状態が継続してきた原因に論及しながら、この問題を解決し、今後、適切な看護を患者に提供し、看護師確保を安定化していくためには、病院内でのクリニカルガバナンスについて、医師と看護師を主として改めて構築をすべきであることや、その方法としての看護情報のIT化に関して課題があることについて言及した。

キーワード：看護、看護必要度、看護記録、クリニカルガバナンス

1．Introduction

With the amendment to medical fees in 2008, patient evaluation tables (table 1) based on the Nursing Care Intensity Evaluation (referred later as NCIE) became a requirement in the notification of basic hospitalization fees in facilities with one nurse for seven patients on average (later referred to as 7:1 hospitals). Then, in 2010, NCIE also became compulsory to notify extra fees in facilities with one nurse for ten patients (later referred to as 10:1 hospitals). Thus, NCIE can be considered as the main index to evaluate nursing care in acute care facilities. Moreover, it is expected that the new amendment of medical fees scheduled for this year (2012) will increase even more the importance of the NCIE.

The fact that the NCIE has been used to set prices for medical services ("medical fees") over the past few years is an indication that it has become an appropriate tool for the basic charge system and for guaranteeing uniform medical fees throughout Japan.

It goes without saying that because medical fees are set uniformly across Japan, evaluation based on nursing care intensity should use nationally standardized values. Three conditions are required to achieve this goal: (1) clarifying the definition of items assessed through the NCIE; (2) Providing training to evaluators who can perform their duties while complying strictly with these definitions; and (3) keeping nursing records sufficiently accurate to determine if the evaluation was appropriate or not.

The first definition of the Nursing Care Intensity Items (later referred to as NCII) can be found in the text "Introduction to Nursing Care Intensity Evaluation," published in 2003[1)]. In 2006, this definition was revised in a second edition to more closely reflect frontline clinical conditions[2)]. In 2008, because nursing care intensity became a requirement for the notification of medical fees, a third edition of the text was published[3)] with a clearer explanation of appreciation standards regarding assessments. Finally, the fourth edition added a few minor changes and completed the definition[4)]. However, the standardization of this definition only occurred in 2012.

Regarding the training of nursing care intensity evaluators, the number of persons who had underwent this training already exceeded 40,000 by the end of December 2011, which means that a suitable number of evaluators had been secured. The actual conditions surrounding evaluators' training and the methods for in-hospital training have also already been announced.

Even though it is crucial to standardize the NCIE, some issues regarding nursing records still remain. The data used in this paper will include the results of nurses' work volume surveys to suggest new approaches for keeping nursing records.

The nursing records mentioned in this paper are referring to nursing records in general, and not specifically to records used for the NCIE because a standardization of the NCIE also implies reviewing the current state and issues of nursing records in general.

2. Nursing records as the core of the NCIE

For a 7:1 hospital to obtain basic hospitalization fees, it is essential that the person conducting the evaluation have had some training in hospitals. Furthermore, hospitals have been notified that it would also be preferable that the instructor for this in-hospital training have completed a specific training conducted by the national government, a medical organization (with a certificate of completion issued), or else to have undergone training conducted by someone who is highly skilled in evaluating.

This can be justified by the fact that, in order to conduct NCIE with national standards, it was necessary to increase the quality of the evaluators assessing all the 41 assessment items shown in table 1. Another condition to guarantee the appropriateness and reliability of the results from the NCIE was to keep nursing records that could be use as evidences for the evaluation.

In other words, nursing care intensity evaluations should be conducted based on a nurse's observation of the patient, in accordance with specified standards. It must also be possible to

Table 1: List of Nursing Care Intensity Items (NCII) assessed in four different settings (defined mainly by the patient's type and level of care needs)

Item number	Items	NCII assessed for the screening of patients with moderate care needs	NCII assessed for the screening of patients with severe care needs	NCII assessed for the screening of patients with highly severe care needs	NCII assessed for the screening of patients with daily care needs
A-1	Wound care	○	○		
A-2	Use of resuscitation techniques		○		
A-3	Blood-pressure check	○	○		
A-4	Perdiodic urine measurements	○	○		
A-5	Respiratory care	○	○		
A-6	More than three intravenous lines simultaneously	○	○		
A-7	Electrocardiogram	○	○	○	
A-8	Use of infusion pump		○	○	
A-9	Measurement of alterial blood pressure		○	○	
A-10	Use of syringe pump	○	○	○	
A-11	Measurement of central venous pressure			○	
A-12	Use of artificial respirator		○	○	
A-13	Blood transfusion and use of blood products	○	○	○	
A-14	Measurement of pulmonary arterial pressure		○	○	
A-15	Specific treatment		○	○	
A-16	Specialized treatment and medical procedure	○	○		
A-16-①	①Administration of anticancer drugs	○			
A-16-②	②Analgesic drug injection	○			
A-16-③	③Radiotherapy	○			
A-16-④	④Administration of immunosupressants	○			
A-16-⑤	⑤Administration of vasopressor	○			
A-16-⑥	⑥Use of antiarrythmic agents	○			
A-16-⑦	⑦Drainage	○			
B-1	bed rest instructions		○		○
B-2	Capacity to lift at least one arm to the chest		○		○
B-3	Roll-over	○	○	○	○
B-4	Rise up	○	○	○	○
B-5	Maintain a seated posture	○	○	○	○
B-6	Transfer	○	○	○	○
B-7	Mobility		○		○
B-8	Buccal cavity hygiene	○	○	○	○
B-9	Meal ingestion	○	○		○
B-10	Putting on and taking off clothes	○	○		○
B-11	Communication with others		○		○
B-12	Listenning to care related instructions		○		○
B-13	Dangerous behavior		○		○
Spe. Nur.-1	Sugery				
Spe. Nur.-2	Discharge from the hospital anytime soon				
Spe. Nur.-3	Giving instructions (as planned) for more than 10 min				
Spe. Nur.-4	Decision support (as planned) for more than 10 min				
Spe. Nur.-5	Complains about physical symptoms				
Spe. Nur.-6	Main diagnosis on the day of the examination				

determine if the assessment was correct or not by looking at the nursing records. The guidelines for the assessment of NCIE state that: "The inclusion of records is a required condition in the evaluation of each item checked"[5]; that is, records are now essential to support the NCIE.

The records required for the NCIE refer to the following: nursing records indicating the condition of a patient on the day considered and indicating the type of nursing care provided by the nurse in response to that condition. Furthermore, the records must enable a judgment of whether the evaluation of the item was made correctly, in keeping with the third

requirement of the nursing standards outlined above.

Even though it is crucial, record on both the patient's condition and the care provided to the patient are not always kept in the front lines of clinical nursing. Furthermore, these records must appear acceptable when read by a third party; that is, given the condition of the patient in question, that it would be natural and appropriate for the recorded nursing care to have been provided.

In evaluations of nursing care intensity, there is a rule stipulating that even though the patient's condition is serious and even though the nurse clearly stated that he or she provided the specified type of care, the patient's condition shall be evaluated as "least serious" if there is no record of it. Similarly, there is a rule stipulating that if there is no record of a type of care provided by the nurse, the assumption will be that no care was provided. For this reason, if no record exists, the evaluator cannot evaluate the care provided even if there is in fact a patient in serious condition, and even if nursing care was provided.

However, if this rule is followed, then NCII can be evaluated accurately even if the patient was hospitalized one year ago and regardless of whether the patient has already been discharged. On the other hand, if these records do not exist, then the assumption will be that the patient's condition was mild, and that absolutely no care was provided.

For this reason, as long as the records exist, it should be possible to evaluate whether or not the nursing care intensity of the patient was evaluated accurately, and if an audit is implemented in relation to medical fees, it is easy to verify whether or not that evaluation was appropriate.

3. Current state and issues regarding nursing records

1) Records of medical treatment and daily care

A number of issues have been pointed out in the past regarding nursing records, including specific recording methods and problems with recorded content[6)-8)], as well as the absence of systems related to these records[9)]. It is expected, however, that the standardization of nursing records will be promoted because records of nursing care are used for the NCIE and thus, they are now compulsory in order to obtain medical fees.

Nursing records basically comprise three types of information: Basic (personal) information; a nursing plan (recovery plan); and "records of events." The Basic (personal) information refers to the record of attributes and other unique information of a patient requiring nursing care. Basic (personal) information is not recorded every day but only on the first day of hospitalization. The next type of information, the nursing plan (recovery plan), is a record of the unique care plan established to resolve the problems faced by a patient requiring nursing care. Recently, many hospitals keep a standard nursing plan in an electronic format, and then add individual adjustments based on a general outline of (intended) day-to-day nursing care. However, this plan is nothing more than a preliminary plan that may or may not be put in practice. Thus, it is necessary to record whether or not the care included in this plan was actually provided.

However, not only few hospitals keep this type of record but the format of these preliminary plans also differs drastically from one hospital to another. Up to now, there have been no attempts to achieve any standardization.

The "records of events" refers to a record of the progression of problems faced by a patient requiring nursing care, as well as the medical treatments and care actually provided. It refers to a combination of documents, including event forms for written content, along with body temperature tables, focus charting, and flow sheets. Here as well, the content differs substantially from one hospital to another, not only regarding the format but also in terms of volume of information. Here also, no attempt was made to standardize the process.

Up to now, there have been studies in which nursing records were gathered from many hospitals[10−13] but most of these studies only made descriptions of nursing care practices over time. In "Policies regarding the handing of nursing records and treatment information"[14], the Japanese Nursing Association states that the purpose and significance of nursing records is to describe "the types of nursing care services that the nurse provides, the reason behind this provision, and the changes in the patient's condition that result from that care." There have been almost no attempts, however, to clearly describe this causal relationship[15].

There are notably few records of the actual care provided during daily care. The importance of recording the patient's condition to be able to answer questions such as "Why was it necessary or not necessary to provide this care?" is not sufficiently promoted. For example, the following concern is frequently discussed during study meetings: "It was obvious, so I didn't record it, but I wonder if I should have".

On the other hand, descriptions regarding assistance in treatment (instructions received, etc.) including event forms, body temperature tables, etc., are almost completely absent from records in the case of recovery care.

Normally, care in recovery is a function unique to nursing care and is provided in line with nursing care policies and plans. Even though such care activities should be recorded systematically in accordance with the nursing care process, these types of records are in fact uncommon[16].

2) Reasons why nursing records are not always kept

There are numerous reasons that could explain why there are almost no records of the nursing care provided and on the patients' conditions. Even when records exist, the information may not have been fully noted or the instructions about recording may have been too vague.

Nurses start providing nursing care after obtaining a license from the Ministry of Health and Welfare. For this reason, nurses must take responsibility for their actions, and normally, they must leave a record as a proof that they have carried out their responsibilities. For example, in the case of physicians, this requirement is stipulated in the Medical Practitioners Law, and in the case of dental hygienists, in the Dental Hygienists Law. However, with the exception of obstetric nurses, there is no law stipulating this requirement for nurses.

In other words, there is no stipulation in the Act on Public Health Nurses regarding the

way nursing care records should be kept or specifing the content of those records. The absence of common regulations or stipulations about the submission of nursing care records has led to a situation in which records are not always kept. Moreover, even when they are, the format differs from one medical facility to another. This situation has become a hindrance to the management of nursing care records.

However, there is one instance of specific regulations regarding the content of nursing care records: the nursing care records related to basic hospitalization fees. Here, we find a paragraph entitled "Provision of nursing care" with the subparagraph (1) Nursing Care Operations, (b) Implementation of Nursing Care which describe the need to take into consideration the following seven detailed items nursing care records: ① Observations of the patient's condition; ② Report of symptoms; ③ Care during recovery, including bathing, meals, and toileting; ④ Assistance in medical treatments; ⑤ Assistance and direct action in specific medical treatments (administering medications, injections, changing bandages, etc.); ⑥ Measuring body temperature or blood pressure, taking and measuring samples, assisting in tests; and ⑦ Providing guidance to patients and family members with regard to recovery. This paragraph is based on article 5 of the Act on Public Health Nurses and includes the following description: "A nursing care plan shall be created based on medical treatment policies and taking into consideration the patient's physical, mental, and social situation. Appropriate nursing care shall be provided in keeping with the status of the patient's illness".

Furthermore, the patient's personal records, as indicated below, must be properly recorded in the nursing care records. According to the Ministry of Health, Labor and Welfare in 1998, "Records related to nursing care shall be divided into two main categories: nursing records for individual patients and records related to nursing care management. Nursing care, treatments, observations, etc., for individual patients shall be included as part of the medical history in the records for individual patients, and shall be stored appropriately."

An important perspective when examining nursing care records from a legal angle is the "relationship of rights and obligations." The facts regarding casual relationships ("Who did, or did not do, what, for whom, when, and what was the result?") should be indicated to support the nursing care records, but the absence of documents sufficiently detailing these facts has long been considered a problem in the front lines of clinical medicine[17].

3) Records in the front lines of clinical medicine and related issues

As stated above, the necessity and importance of keeping accurate nursing records are not sufficiently understood, and a major reason for this is the absence of clear stipulations on requirements and formats, as could be find in birth assistance records. In a survey involving 2,449 nurses, the most common reply to "When do you write your records?" (70.4%) was "Any time during work hours," followed by "When I am free" (62.4%) and "Outside of work hours" (33.9%)[18].

These results indicate that for most nurses, nursing care records are supposedly written during free time. However as nurses are working in very busy clinical environments their free time is very limited and these records are simply not kept. Furthermore, more than one third

(33.9%) of respondents said that they write these records outside of regular work time, making it even clearer that nurses are unable to make these records during their regular working hours.

There is no significant statistical difference in the amount of time spent on keeping records accounting to the ratio of nurses to patients. In general, nurses estimated that the time spent on keeping records was around 20 min. Looking at the amount of time spent on keeping records for each individual patient, the average time was 69.9 min. in a 24-hour period[19], so assuming that there are three shifts, each nurse spends about 23 minutes. These results seem to confirm that nurses spend around 20 minutes to keep record every day.

Based on the results of a survey on nursing care spend more than 40% of their total work time to support their patient to perform activities of daily living (ADL). This is referred to as "care in recovery," and is related to the item B of the NCIE. This is almost twice the time spent in assisting doctors in medical treatments[20].

Most of the records contain A items (Table 1) but little information is recorded on B items. Some nurses even voice the opinion that no records of B Items (referring to assistance in activities of daily living) are made because nursing care is not suppose to include this type of care. The problem here, however, is that this care given during recovery would not appear on any record, even though it accounts for about half of the nurses' total working time.

The fact that nurses spend much of their time in assisting with ADL (meals, toileting, dressing and undressing, etc.) is of course a problem and should be studied. However, but in order to resolve this problem it is important to record the actual conditions related to the provision of this care by nurses.

4. Creating a positive environment for keeping records

(1) Standardization of records for the introduction of efficient IT systems

Is seems that nurses' inability to make time for records is not only a problem in Japan but in other countries as well. Currently, few incentives exist for keeping records, and the nurses themselves, as specialists, do not have a sufficient awareness of the importance of this process. This has been pointed out as a problem[21].

However, recently there has been a rapidly growing awareness in the United States that time spent by nurses on writing patients' records and statistics, on following up on and evaluating frontline care and on time spent by supervisors and nurses on reading information required to make judgments and decisions (indirect services) is as important as the time spent by nurses in clinical settings, for example changing IVs and providing actual care in hospital rooms (direct services).

This is because when redeeming medical fees in United States, patient reports based on nursing records are required, and patients often request these reports as well. These reports also contain information that is important to the patient when selecting a hospital.

As stated above, records related to day-to-day patient evaluations and nursing care became required as evidence for the NCIE since the amendment to medical fees in 2008. However, items

included in the NCIE do not cover all duties handled by nurses, and assess only a small segment of information regarding the patient's condition. For nurses, recording even this limited content is seen as a major burden in the execution of duties.

Meanwhile, many hospitals are considering the introduction of electronic medical charts systems and other IT systems with a view toward tie-ins with this patient related information and records of nursing care implemented. Recently, a common misunderstanding is to consider that the introduction of such IT systems is enough to automatically reduce the burden of keeping records. No matter how outstanding these systems may be, the fact remains that if there are no regards there to begin with, systematization is not an option. Even if a truly outstanding IT system is introduced, the records are still not created automatically. It is important to notice that no personnel other than nurses themselves can gather and input the information. Systemization can only occur when there are records to be systemized, and with no records, there can be no system.

The conversion of these records into electronic format will require a temporary increase in workload and restrictions for nurses. This is because the new IT systems that will be used at medical facilities will have to accommodate team care, so they need to be integrated in such a way that any staff member can look up patients' from any terminal[22]. This will require studies on recording formats and on the way that persons in various positions within those medical facilities may have access to these records.

Next, the introduction and modification of IT systems used by specialists in the medical field will require involvement from all the medical specialists sharing those systems[23−25], so the actual processes of implementation and modification will require considerable time from nurses as well.

In addition, an efficient management of such an IT system will require the cultivation of an organizational culture on clinical governance and the reform of both hospital organizations and systems used as tools. Medical facilities that do not implement such reforms will be unable to build a useful and convenient system, and it is likely that the introduction of a system under these circumstances would conversely result in even more time being spent on the record-keeping process.

(2) Building an organizational culture through clinical governance

In the United States, it was pointed out that the medical expenses are not only increasing because of the growth in elderly population but also because the structure of healthcare system make it difficult to evaluate the improvements in productivity. Moreover, in a service industry like medical care, it is difficult to increase work efficiency and thus, it is difficult to secure labor forces through another means than just increasing salaries. This inevitably leads to greater pressure to increase both wages and service fees. For this reason, it is essential to conduct new studies regarding the type of governance that will be required in hospitals in order to constantly maintain high-quality labor forces to provide these services.

Since 1998, clinical governance is mainly defined in England as: "a system through which NHS organizations are accountable for continuously improving the quality of their services

and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish"[26]. This generally encompass various fields such as: "education, clinical audit, clinical effectiveness, risk management, research and development and openness."[27]

Clinical governance refers to a structure that contributes to the provision of care based on the combined capabilities of the organization, including staff from various medical facilities. This governance strives to maintain the abilities of people and organizations to effectively create the changes needed to achieve a high level of quality in care provided. It is thus essential to conduct new studies regarding the types of governance that will be required in hospital management in order to constantly maintain high-quality labor forces to provide these specialized services.

The primary goal of clinical governance is to ensure that appropriate care is provided to the patient according to a previously determined care plan. In the UK[28−32] and Australia[33], studies are conducted to determine how care can be provided appropriately and identify accountability as the most important factor to achieve this goal. As an effort to provide this accountability to the patients, analyses are also conducted with a focus on the establishment of steering committees and management organizations[34]. In those analyses, nursing care records are used as important contributing materials.

The most effective means to continuously improve these systems has been to build systems to check whether or not standards of care have been met. In other words, to introduce a systematic and clarified accountability, the standardization of care is a crucial step.

For this standardization, objective data should be gathered, analyzed and used as the cornerstone of care provision. This presuppose the existence of an efficient system to keep nursing records; that is, a system that enables nurses to write records on patients' conditions and on care provided on a daily basis.

5. In conclusion:

It is likely that in the future, 7:1 and 10:1 hospitals will be required to evaluate Nursing Care Intensity on a daily basis. This means that the hospitals will need to keep nursing records on patients' conditions efficiently enough to be used as a proof that care has actually been provided. Furthermore, in the near future, patients should have the possibility to have access to these records, so objectivity of content will have to be guaranteed.

At hospitals, head nurses will be accountable to patients with regard to nursing care. In many cases, head nurses will also have to bear the role of communicating patients' requests about care content and concerns regarding treatment policies to physicians. It is clear that, compared to doctors, nurses are socially closer to the patient because they spend a lot more time in the hospital wards and thus have access, through observation, to more recent and complete information about the patients. For this reason, nurses are the most qualified to undertake this important task of recording information on the patients.

In the future, nursing care managers will have to ensure that nurses have the time to keep the records within working hours and not after shifts or only when the nurses have free

time, as it is currently the case. They will also have to provide on-the-job training to increase the accuracy of nursing care records.

We have already entered an era in which patients can select the medical services that they receive at medical facilities. We believe that the records on nursing care discussed in this paper are the most easily understandable materials to support their decision regarding the types of medical services that they are willing to pay for. There is little doubt that the awareness towards the importance of these records will grow in Japan, as it has already been the case in other countries. In this context, the standardization of records in the medical field should be considered as a matter of high priority.

Bibliography

1) Iwasawa K, Tsutsui T, eds. Intensity of Nursing care needs -New standards for the evaluation of nursing care services-. Nihon kango kyo-kai shuppan-kai; 2003.
2) Iwasawa K, Tsutsui T, eds. Intensity of Nursing care needs -New standards for the evaluation of nursing care services-. 2nd edition. Nihon kango kyo-kai shuppan-kai; 2006.
3) Iwasawa K, Tsutsui T, eds. Intensity of Nursing care needs -New standards for the evaluation of nursing care services-. 3rd edition. Nihon kango kyo-kai shuppan-kai; 2008.
4) Iwasawa K, Tsutsui T, eds. Intensity of Nursing care needs -New standards for the evaluation of nursing care services-. 4th edition. Nihon kango kyo-kai shuppan-kai; 2010.
5) Id. p.38.
6) Taylor H. An exploration of the factors that affect nurses' record keeping. British Journal of Nursing 2003;12(12):751-758.
7) Abraham A. Inadequate nursing care and the failure to keep adequate records. - Professional nurse 2003;18(6):347-349.
8) Cheevakasemsook A, Chapman Y, Francis K, Davies C.
The study of Nursing documentation complexities. International Journal of Nursing Practice 2006;12:366-374.
9) Berg M. Patient care information systems and health care work: a sociotechnical approach. International Journal of Medical Informatics 1999;55(2):87-101.
10) Heartfield M. Nursing documentation and nursing practice: a discourse analysis. Journal of Advanced Nursing 1996;24:98-103.
11) Martin A, Hinds C, Felix M. Documentation practices of nurses in long-term care. Journal of Clinical Nursing 1999;8:345-352.
12) Moloney R, Maggs C. A systematic review of the relationships between written manual nursing care planning, record keeping and patient outcomes. Journal of Advanced Nursing 1999;30:51-57.
13) Stokke TA, Kalfoss MH. Structure and Content in Norwegian Nursing Care Documentation. Scandinavian Journal of Caring Sciences 1999;13:18-25.
14) The Japanese Nursing Association. Policies regarding the handing of nursing records and treatment information. Nihon kango kyo-kai shuppan-kai 2005:30-31.

15) Enoda M, Yamakawa K, Hiruko M, Ito C. A Study on the Principle of Nursing Documentation (4) : How to Report Nursing Practice Effectively. Bulletin of Kobe city Junior college of Nursing 2005 ;24:9-16.
16) Ito C, Yamakawa K, Hiruko M, Enoda M. A Study on the Principle of Nursing Documentation (2) : Nursing Process and Nursing Documentation. Bulletin of Kobe city Junior college of Nursing 2003;22:2-8.
17) Okuyama A, Maeda S. The issue of using nursing records in trial. Nursing administration 2008:18(4);284-287.
18) Tsutsui T. Nursing records in the Nursing Care Intensity Evaluation -The need for stan dardization-. Kango 2008;60(15):46-49.
19) Tsutsui T. Application of research on the Nursing Care Intensity Evaluation -A new nursing management system-. Iryo-Bunka-shaTokyo 2003:112.
20) Tsutsui T. The creation and range of the Nursing Care Intensity Evaluation -Role and significance for the revision of the medical care system-. Shorin-shaTokyo 2008:29.
21) Nahm R, Poston I. Measurement of the effects of an integrated, point-of-care computer system on quality of nursing documentation and patient satisfaction. Comput Nurs. 2000;18(5):220-229.
22) Ball M. Hospital information systems: perspectives on problems and prospects, 1979 and 2002. International Journal of Medical Informatics 2003;69(3):83.
23) Helleso R, Ruland CM. Developing a module for nursing documentation integrated in the electronic patient record. Journal of Clinical Nursing 2001;10:799-805.
24) Ginneken AM.The computerized patient record: balancing effort and benefit. International Journal of Medical Informatics 2002;65:97-119.
25) Currie LM.Evaluation frameworks for nursing informatics.International Journal of Medical Informatics 2005;74:908-916.
26) Scally G, Donaldson LJ. Clinical governance and the drive for quality improvement in the new NHS in England. British Medical Journal 1998;317(7150):61-65.
27) Starey N. What is clinical governance?. Evidence-based medicine. London: Hayward Medical Communications; 2001.
28) McSherry R, Pearce P. Clinical governance: a guide to implementation for healthcare professionals. 2 nd ed. Oxford: Blackwell Publishing; 2007.
29) Lugon M, Secker-Walker J, editors. Clinical governance in a changing NHS. London: Royal Society of Medicine Press; 2006.
30) Chambers R, Boath E, Rogers D. Clinical effectiveness and clinical governance made easy. 3 rd ed. Oxford: Radcliffe Medical Press; 2004.
31) Swage T. Clinical governance in health care practice. 2 nd ed. Oxford: Butterworth-Heinemann; 2004.
32) Wilkinson JE, Rushmer RK, Davies HTO. Clinical governance and the learning organization. J Nurs Manag. 2004; 12: 105-13.
33) Travaglia JF, Braithwaite J. Clinical governance, safety and quality: an overview of the literature. Sydney: Centre for Clinical Governance Research, University of New South Wales;

2007.
34) Office of Safety and Quality in Health Care. Introduction to clinical governance -a background paper-. Perth: Western Australian Department of Health; 2001.

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Role of standardized nursing records in the evaluation of nursing care intensity

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Abstract: The medical expenses are increasing because of the growth in elderly population and also because it is difficult to evaluate the improvements in productivity. Moreover, another structural issue of the current system is related to the fact that the only way to secure sufficient healthcare professionals is through an increase in salary. One purpose of hospital management is precisely to examine which type of governance is the most appropriate to secure a high quality workforce. Here, the quality and number of nurses is one major concern as they are at the core of the hospitals' manpower.

Currently, in the Japanese charge system for medical services, the only method used to calculate the number of necessary nurses is called the Nursing Care Intensity Evaluation. This method uses data from the nursing records regarding the medical services provided to the patient and the patient's condition. Thus, this compulsory collection of information through nursing care records play a major role in estimating if the care provided is appropriate to the patient's condition.

However, the format of nursing care records is still not standardized and the time 4 for nurses to keep records is not always secured. This paper attempts to address this issue by debating solutions such as the informatization of nursing records and the implementation of a clinical governance that can secure appropriate care to patients.

Key Words: Nursing care, Nursing Care Intensity Evaluation, Nursing records, Clinical governance.